

FLORIDA STATE UNIVERSITY

2020-2021

GENERAL BULLETIN

GRADUATE EDITION

Including the full text of the Graduate Edition of the General Bulletin.

Statement of Publication Fall 2020 (Volume CXV, No. 2). The **Florida State University Graduate Edition** of the **General Bulletin** is published annually in August by Florida State University, Office of the University Registrar, Tallahassee, FL.

Upon request, this publication also is available in alternative formats through the Office of Equal Opportunity and Compliance, phone: (850) 645-1458 or e-mail: amwagner@admin.fsu.edu; or the Office of Accessibility Services: phone: (850) 644-9566 or e-mail: oas@fsu.edu.

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PRESIDENT'S MESSAGE

Florida State University is world-renowned for the quality of its faculty, academic programs and strong focus on career success producing graduates who are critical thinkers, innovators, and leaders.

Designated as a pre-eminent university by the Florida Legislature in 2013 for meeting rigorous standards of achievement, FSU now ranks among the nation's Top 20 public universities and is the fastest rising public institution in the nation.

From its excellence in the sciences, arts and humanities, to its service-learning mission, an entrepreneurial culture, championship athletics and a prime location in the heart of the state capital, Florida State is widely known for offering an outstanding academic environment.

Located on Florida's oldest continuous site of higher education, FSU is proud of its rich heritage and core values that champion excellence at every level. Building on its unique strengths, it is a recognized model for student success, distinctively providing academic rigor and an amazing array of research, creative efforts and engagement opportunities to students in a personal and caring atmosphere.

FSU students are among the nation's best and brightest. They graduate at the highest rate found at any university in Florida, 72 percent in four years, a rate that ranks among the Top 10 nationally. An outstanding student-faculty ratio combined with a student-centered approach ensures every student receives a world-class education. FSU has eliminated disparities in its diverse student population and is now the largest and most diverse university in the country with an experiential learning requirement before graduation.

The University is creating a culture across all academic disciplines that embraces entrepreneurship, interdisciplinary learning and creativity. Through the largest private gift to a public university in Florida — \$100 million — Florida State has established the Jim Moran College of Entrepreneurship, the first degree-granting college of its kind in the nation.

Our Student Veterans Center and programs designed to aid student-veterans' transition to academic life, our Honors Scholars and Fellows House, Office of National Fellowships and Center for Undergraduate Research and Academic Engagement (CRE) are all examples of our strong commitment to help our more than 42,000 students reach their highest academic goals.

As evidence of their success, the University's Garnet and Gold Scholar Society awards undergraduates a credential affirming their leadership and professional, citizenship, and research skills, demonstrating their ability to build collaborative relationships in the academic, local, or global community.

With many of our colleges ranked among the country's best, we stand firmly among the nation's top public universities. Led by a world-renowned faculty that has included six Nobel laureates; numerous eminent scholars in the arts and sciences; Tony, Oscar, Emmy, and Pulitzer award winners, our academic programs continue to receive major recognition for their quality and overall strength.

Florida State University's 17 colleges and its Graduate School offer more than 295 undergraduate, graduate, doctoral, professional, and specialist degree programs, including medicine and law, covering a broad array of disciplines critical to society today. Each year the University awards approximately 3,000 graduate and professional degrees.

With its impressive breadth of leading graduate, professional, and undergraduate programs, Florida State University is a demanding, intellectually stimulating, yet warm and caring environment for students and faculty. Recognized nationally for its commitment to diversity, Florida State has been named by the Institute for Higher Education Policy as one of the top 10 institutions in the nation for its outstanding efforts to improve access and support and educate traditionally underrepresented students.

Florida State's arts programs — dance, film, interior design, music, and theatre — are among the finest in the world, offering an arts education comparable to leading conservatories. Our creative writing program is ranked among the nation's best and is home to the most consistently honored and published student body in the country. Florida State is responsible for governance of the John and Mable Ringling Museum of Art and associated arts programs, one of the largest museum/university complexes in the nation.

Other nationally recognized top programs include physics, chemistry, psychology, criminology, public administration, library science, information, education, business and law.

At the doctoral level, interdisciplinary programs draw on notable research faculty strengths that transcend the traditional disciplines, including neuroscience, molecular biophysics, computational science, materials science and research at the National High Magnetic Field Laboratory — home to the world's most powerful magnets.

Our excellence shines beyond traditional academic settings. Located in countries throughout the world, our international programs are unparalleled. In the area of athletics, our scholar-athletes continue to perform at championship levels on and off the field, and their hard work and dedication add to this University's outstanding reputation. Our students supplement their academic pursuits each year with hundreds of thousands of hours of community-service outside of the classroom. In immeasurable ways, the University reaches out to our community, region, state, and nation. This level of service has been recognized by the Carnegie Foundation, which has selected Florida State for inclusion in its prestigious Community Engagement classification.

With a dedicated faculty and staff, a commitment to strong graduate and undergraduate programs that prepare students well for the marketplace, and a powerful research agenda that contributes to the nation's economic well-being and quality of life, Florida State University is living proof of what it means to be an exciting leader in higher education. I hope that, as you become a part of our community, you will join us in our continuing pursuit of excellence. Be Living Proof.

UNIVERSITY NOTICES

President's Statement on Equal Opportunity and Non-Discrimination

Florida State University is an equal opportunity employer and educational provider committed to a policy of non-discrimination for any member of the University's community on the basis of race, creed, color, sex, religion, national origin, age, disability, genetic information, veterans' status, marital status, sexual orientation, gender identity, gender expression, or any other legally protected group status. This policy applies to faculty, staff, students, volunteers, visitors, applicants, and contractors in a manner consistent with applicable laws, regulations, ordinances, orders, and University policies, procedures, and processes.

In pursuing its mission of excellence as a comprehensive, graduate-research university with a liberal arts base, the University strives to create and maintain a harmonious, high performance work and educational environment. Conduct that discriminates, harasses, or intimidates by threat, is contrary to our commitment. Further, workplace behavior that is disruptive to the operations of the University or that impairs workplace discipline interferes with this mission.

It is my expectation that all members of our community are provided equitable opportunities to succeed and enrich the strength, skill, and character of the University. It is also expected that all members of our community will help create a work and educational environment that promotes fairness, respect, and trust, free from discrimination, harassment, or retaliation.

The University will continue to reinforce its commitment of non-discrimination to all groups protected by local, state, and federal law. We will continue to monitor our methods of recruitment, retention, and advancement of qualified faculty, staff, and students and annually examine our affirmative action plan, as prescribed by federal guidelines, to measure whether our campus is reflective of the community we serve.

The University further recognizes that discriminatory or harassing behavior may create an intimidating or hostile environment that interferes with the University's mission. As a result, the University has established internal complaint procedures available to all who believe their experience on any of our campuses has been less than appropriate.

To facilitate University-wide compliance, I have appointed Renisha Gibbs, Associate Vice President for Human Resources/Finance and Administration Chief of Staff, to develop, administer, and coordinate University-wide initiatives and complaint investigations. This will be accomplished through collaboration with the Title IX Director; Dean of Students Department; the Office of Faculty Development and Advancement; the Athletics Department; and all University divisions, colleges, and departments.

Questions regarding the above may be directed to your supervisor or Renisha Gibbs at (850) 644-8082 or rgibbs@fsu.edu. To view the University's Equal Opportunity, Non-Discrimination, and Non-Retaliation Policy in its entirety, go to <http://policies.vpfa.fsu.edu/policies-and-procedures/faculty-staff/equal-opportunity-and-compliance-eoc#H3>.

President's Statement on Title IX

"No person in the United States, shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972, and its implementing regulation at 34 C.F.R. Part 106 (Title IX).

Florida State University does not discriminate on the basis of sex/gender in education programs and activities, and, as a recipient of Federal financial assistance for education activities, is required by Title IX to ensure that all of its education programs and activities do not discriminate in such a manner. Sexual harassment, which includes acts of sexual violence, is a form of sex discrimination prohibited by Title IX. Additionally, the Florida Educational Equity Act prohibits discrimination in schools based on race, ethnicity, national origin, gender, disability, or marital status. Fla. Stat. § 1000.05 (2012). Furthermore, this commitment is reaffirmed in FSU's *Sex Discrimination and Sexual Misconduct Policy*, which is applicable to all faculty, staff, students, visitors, applicants, and contractors.

The University's Title IX Director is responsible for overseeing the development of sexual misconduct policies, ensuring compliance with Title IX and relevant federal and state regulations, and investigating Title IX complaints alleging **student** sexual misconduct. The Human Resources Deputy Coordinator will oversee investigations of sexual misconduct by **employees**

and **third parties**. The Athletics Deputy Coordinator will accept Title IX incident reports to forward to the Title IX Director, and will ensure athletics equity compliance. The FSUS Deputy Coordinator will oversee investigations of sexual misconduct by **K-12 students**. Questions regarding Title IX, as well as concerns about and complaints of non-compliance (including complaints of sexual harassment, sexual assault, sexual violence, or other sexual misconduct), should be directed to the Title IX Director or a Title IX Deputy Coordinator.

Title IX Director:

Tricia Buchholz

Title IX Director

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Complaints will be addressed following the University's discrimination complaint procedures, *Equal Opportunity, Non-Discrimination, and Non-Retaliation Policy and Procedures* and the *Student Conduct Code*. Some acts of sexual misconduct may also constitute violations of criminal law and require mandatory reporting to the FSU Police Department, e.g., sexual battery, indecent exposure, sexual abuse, etc. In such instances, refer to the University's Sex Discrimination and Sexual Misconduct Policy and contact the FSU Police Department at (850) 644-1234. Questions about the application of Title IX may also be directed to the Office for Civil Rights, US Department of Education.

Title IX Frequently Asked Questions: For an expanded explanation of each answer, please follow the link.

What is Sexual Misconduct?

An umbrella term used to refer to a broad range of sexually inappropriate behaviors prohibited by Florida State University Policy. Sexual Misconduct includes all forms of non-consensual sexual activity and unwelcome sexual conduct including: sexual violence (rape/sexual battery/sexual assault); relationship violence (domestic violence and dating violence); stalking; sex- and gender-based discrimination (including gender identity, gender expression, and sexual orientation); sexual harassment; and other forms of sexually exploitative behavior. For definitions of sexual misconduct, please see Appendix D of the full *Policy*.

Is discrimination based on pregnancy or parental status a type of sex discrimination?

Yes. Additionally, reasonable pregnancy and parental accommodations may be available, upon request. For information contact the *Office of Equal Opportunity and Compliance*.

Who is protected from sexual misconduct under Title IX?

All University students, employees, and visitors are protected. This protection is regardless of gender, sexual orientation, sexual identity, race, religion, national origin, and any other protected group status. Students from elementary to graduate school are protected, regardless of full- or part-time or online status.

What is Consent?

Consent is active and ongoing, it is not passive or static! (See Appendix D of the *Policy* for the full definition) Consent includes:

- Asking the question of a capable person with adequate disclosure and without coercion.
- A capable person is someone who is not incapacitated. An individual can be incapacitated by drugs, alcohol, illness, or mental impairment/disability. People who are asleep or unconscious are always incapacitated.
- Consent can be withdrawn at any time.
- Prior consent does not mean future consent.

How do I get confidential support?

You can seek confidential support from the University's *Victim Advocate Program, University Counseling Center, Employee Assistance Program, University Health Center*, or University affiliated pastoral counselors.

Confidential disclosure does not generate a Title IX report or criminal report, unless the disclosing party specifically requests that a report be filed. Confidential assistance is available any time regardless of when the incident occurred. Additional resources can be found within the full *Policy*.

How do I file a report?

Individuals may report information on their own behalf or on behalf of another. A report may be made, verbally or in writing (including online) by bringing the matter to the attention of: Title IX Director; Deputy Title IX Coordinators; FSUPD; or any additional Responsible Employees. There is no time limit for an Affected Party to make a Title IX report, but it may be more difficult to conduct a thorough investigation after an extended period of time. See Section IX of the full *Policy*.

Can I file a report online?

Yes, via <http://report.fsu.edu> or <http://fsu.ethicspoint.com>.

Who MUST report sexual misconduct?

All Responsible Employees, including but not limited to faculty, adjuncts, staff, graduate assistants, and student employees. As a responsible employee, you **must** report any student or subordinate disclosure within two business days. When in doubt, report to the Title IX Director; privacy will be maintained within the scope of the law. Note: Employees and students are encouraged to report peer-to-peer (colleague-to-colleague or student-to-student) disclosure, but are not required to do so.

What do I do if a student discloses to me?

If you are a Responsible Employee, you must report to the Title IX Director, Deputy Title IX Coordinators, or Title IX Investigators. If not a Responsible Employee, you should encourage the student to seek support services. See Appendix E of the full *Policy*.

What if the student who discloses is a minor (or was a minor when the abuse occurred)?

In addition to reporting to the Title IX Director or designee, any incidents of abuse of a minor must also be reported to the Florida Department of Children and Families (DCF) by every individual who is made aware of the abuse. Under Florida's Protection of Vulnerable Persons Act, all Florida residents must personally report any type of child abuse. For more information, please see *Protection of Vulnerable Persons Act Tips*.

What is the difference between a criminal and FSU/FSUS process?

Individuals have the right to pursue both the criminal and internal University processes. They can be pursued independently or simultaneously. We encourage individuals to pursue both processes. The criminal process is conducted by local law enforcement and the state prosecutor's office. The criminal process can result in incarceration and the evidentiary standard is beyond a reasonable doubt. The internal University investigation is overseen by the University Title IX Director. If appropriate, the University will implement interim measures and University sanctioning; the evidentiary standard is preponderance of the evidence.

What happens after a report is made to the Title IX Office?

The University will take appropriate measures to investigate, eliminate the inappropriate conduct, address its effects, and prevent reoccurrence. Whenever possible the Reporting Party's request to the Title IX Director for confidentiality will be maintained. The request for confidentiality must be made to the Title IX Director or designee. Additional information about what happens after disclosure can be found within Sections VIII-XI of the full *Policy*.

What are the rights of the Reporting Parties and Responding Parties?

The rights of both parties during the investigation and adjudication process include a fair, impartial and prompt investigation and resolution of the allegations. For more information see Reporting Party's / Responding Party's Rights, see Appendix H and I of the full *Policy*.

What is retaliation?

Retaliation is any creation of a hostile environment or adverse action threatened or taken against an individual because they:

- make a Report pursuant to this Policy;
- assist another person in making a Report;
- participate in the investigation of such a Report;
- or in good faith and in a reasonable manner oppose conduct that they believe constitutes a violation of this *Policy*.

What do I do if I think someone is retaliating against me?

Report the retaliation immediately to the Title IX Director, a Deputy Title IX Coordinator, a Title IX Investigator and/or the FSUPD.

What could happen if I or someone I know retaliates?

You, or they, could face a charge of retaliation in addition to any charges of sexual misconduct.

What is complicity?

Complicity is any action or behavior done with the intent of aiding, facilitating, promoting or encouraging the commission of an act of Sex Discrimination or Sexual Misconduct.

Where can I get more information?

- *Policy & Appendices*
- *Rights and Resources*
- *kNOW More Campaign*
- *FSU's Title IX Website*
- *Office of Equal Opportunity & Compliance*
- *FSU Police Department*
- *Victim Advocate Program*
- *University Counseling Center*
- *University Health Services*

It is my expectation that all members of our community are provided equitable opportunities to succeed and enrich the strength, skill, and character of the University. It is also expected that all members of our community will help create a work and educational environment that promotes fairness, respect, and trust, free from discrimination, harassment, or retaliation. Behavior that may be considered offensive, demeaning, or degrading to persons or groups will not be tolerated.

Conflicts of Interest

The following policy concerning conflicts of interest applies to graduate students who are being supervised or evaluated by faculty as well as graduate students who are serving as teaching assistants and thus supervising or evaluating undergraduates.

Sexual relationships between faculty members/graduate assistants and students where a direct supervisory or evaluative relationship exists are fraught with the potential for exploitation. The respect and trust accorded a faculty member/graduate assistant by a student, as well as the power exercised by the faculty member/graduate assistant in a direct supervisory or evaluative

role, make voluntary consent by the student suspect. In their relationships with students, faculty members/graduate assistants are expected to be aware of their professional responsibilities and to avoid conflict of interest, favoritism, or bias.

1. When any direct supervisory or evaluative role exists, a consensual sexual relationship between a student and a faculty member/graduate assistant is a conflict of interest.
2. Any situation of direct supervision or evaluation will be ended immediately when a consensual sexual relationship between a student and a faculty member/graduate assistant exists.
3. Any such relationship must be disclosed to the faculty member/graduate assistant's supervisor immediately.
4. Direct supervision includes any type of evaluative role. Examples of direct supervision of the student include teaching the student's class, serving as a thesis or dissertation director, instructor of record, member of the student's thesis or dissertation committee, member of the student's comprehensive or doctoral exam committee, member of other committees where the focus is evaluation or supervision of the student's academic competence or the student's assistantship.

Individuals with Disabilities

Florida State University adheres to *Section 504 of the Rehabilitation Act of 1973* and the *Americans with Disabilities Act of 1990 (ADA)*, as amended by the *Americans with Disabilities Amendments Act of 2008*, in prohibiting discrimination against any qualified individual with a disability. Any student with a disability may voluntarily self-report the nature of the disability and identify needed accommodations to the Student Disability Resource Center, call (850) 644-9566. Florida State University's 504 Coordinator is:

Jennifer Mitchell, Director, Student Disability Resource Center
 874 Traditions Way (108 Student Services Building)
 Phone: (850) 644-9566/TDD (850) 644-8504
 E-mail: jmitchell12@fsu.edu
 Web site: <http://dos.fsu.edu/sdrc/>

To request reasonable accommodations for employment or visitors, please contact the Florida State University Human Resources/Office of Equal Opportunity and Compliance, located at *University Center, Bldg. A, Suite 6200*, or call (850) 645-6519, or view the applicable policy and procedures at <http://policies.vpfa.fsu.edu/policies-and-procedures/faculty-staff/equal-opportunity-and-compliance-eoc#11>.

HIV/AIDS Policy

Students, employees, and applicants for admission or employment at Florida State University who have or who may become infected with HIV will not be excluded from enrollment or employment or restricted in their normal responsibilities and access to University services or facilities due to their HIV/AIDS status, unless individual medically based judgments establish that exclusion or restriction is necessary for the welfare of the individual or of other members of the University community. That is, the University will not discriminate against otherwise qualified HIV-infected applicants, students, or employees.

University Health Services is responsible for monitoring developments with regard to HIV/AIDS, acting upon and administering the policies of the Florida Department of Education Division of Colleges and Universities and the University concerning HIV/AIDS and coordinating the University's efforts in educating the University community on the nature and prevention of the disease.

The University will be guided in its implementation of this policy by current authoritative medical information, applicable federal and state law, Florida Department of Education Division of Colleges and Universities' HIV/AIDS Policy, and the guidelines suggested by the Centers for Disease Control, the Public Health Service, the American College Health Association, and the Florida Department of Health.

Florida State University has designated HIV counselors who are available for FSU students. Counselors are located at University Health Services (850) 644-4567. Confidential HIV testing is available for students at University Health Services. Any interested individuals should call (850) 644-4567 to schedule an appointment.

Florida State University Statement for Students on the Unlawful Possession, Use, or Distribution of Illicit Drugs and Alcohol

Florida State University Alcohol Policy

Introduction

Florida State University affirms the guiding ethical principle of responsible freedom. Students, staff, and faculty are expected to show respect for order, ethical conduct, and the rights of others, and to model in daily living a high sense of personal honor and integrity. Florida State University neither encourages nor condemns the legal consumption of alcoholic beverages. The University recognizes, however, that the majority of undergraduate students are below the legal drinking age and that there are serious health risks and behavior problems associated with the use of alcohol in the collegiate environment. Consequently, alcohol will be permitted at Florida State University or programs sponsored by Florida State University or its direct support organizations only in those settings which:

1. Comply with federal or state laws, local ordinances, University regulations, foreign country laws (in the case of study abroad programs conducted by Florida State University International Programs, Inc.), Student Conduct Code, and this policy;
2. Present minimal health and safety risks; and
3. In no way inhibit the full participation of those who choose not to drink alcohol.

Events and activities that encourage excessive drinking and/or lead to the endangerment of individuals will not be permitted. Any person or group in violation of federal or state laws, local ordinances, or of this policy will be reported to the proper federal, state, local or university authorities for appropriate action.

1. **Policy Pertaining to All Members, Groups, Events, and Organizations in the University Community and Non-University Members, Groups, Events, and Organizations.**
 - (a) No individual under the legal drinking age (minimum of 21 years of age permitted by the State of Florida or the minimum age prescribed by the laws of foreign countries, but in no case below the age of 18 years of age) may serve, sell, consume or possess alcohol on University properties, except to the extent allowed by law within licensed premises or designated areas of the University.
 - (b) Alcohol must be served by a licensed and insured third party vendor. No individual may serve or otherwise provide alcohol to persons under the legal drinking age.
 - (c) The Consumption of Alcohol: The consumption of alcohol on University properties will be restricted to the following areas:
 1. Florida State University Law School Rotunda;
 2. Licensed areas of the university (e.g., Center for Professional Development, Club Downunder, Crenshaw Lanes, Renegade Grill);
 3. Academic food service facilities;
 4. University Center areas include:
 - i. Skyboxes
 - ii. Miller Hall (C3300, UC)
 - iii. President's Box (Level 7, UC)
 - iv. Booster/Alumni Board Rooms (C5300, C5301 UC)
 - v. University Club (Building B, Floor 3, UC)
 - vi. Meeting Rooms (Building B, Floors 5 & 6, UC)
 5. Lounges in Beth Moor at Longmire Building;
 6. WFSU-TV and Radio Broadcast Center;
 7. Premises in and around President's house, Pearl Tyner Alumni Center, and surrounding grounds;
 8. University property not located on the main campus, which has been leased by the University to private entities or persons, referred to in this rule as "private premises," such as Heritage Grove;
 9. Private University living quarters where those present are of legal drinking age (see the Guide to Residence Living, Community Expectations, for further restrictions that may apply in residence halls; or in the case of living quarters provided for study abroad programs, see policies promulgated by Florida State University International Programs Association, Inc.);

10. Premises in Doak Campbell Stadium area used or licensed for use on football game days;
 11. At the following sites, when provided in conjunction with an artistic or municipal event:
 - i. The Fine Arts Gallery;
 - ii. The reception/hospitality room in the Opperman Music Hall;
 - iii. The Fine Arts Building; and the
 - iv. FSU Lab Theater.
 12. Werkmeister Reading Room (201 Dodd Hall);
 13. In common areas for special events approved by the University President or his/her designee. For faculty, the designee is the Vice President for Faculty Development and Advancement, for student groups, the designee is the Vice President for Student Affairs, and for all other groups the designee is the Vice President for University Relations.
- (d) The Sale of Alcohol: The sale of alcohol on campus must be approved by the President or designee. Although the President or designee may approve the sale of alcohol on campus, only the Division of Alcoholic Beverages and Tobacco can issue the permit required to sell alcohol in the state of Florida.
- (e) Promotional Guidelines: The promotion of activities or events shall not advertise alcohol or sponsorship by alcohol marketers without prior written approval of the Vice President for University Relations. Events that seek advertising approval must meet the following requirements:
1. Alcohol shall not be used as an inducement to participate in a University event and may not be offered as a prize or gift in any form of contest, drawing or competition. Social events which encourage drinking, drinking contests, or drunkenness, and the advertisement of such events, are prohibited.
 2. Alcohol advertising on campus or in campus media, including that which promotes events as well as product advertising, shall not portray drinking as a solution to personal or academic problems of students or as an enhancement to social, sexual, or academic status.
 3. Advertising for any University event where alcoholic beverages are served shall mention the availability of non-alcoholic beverages as prominently as alcoholic beverages.
 4. Promotional materials, including advertising for any University event, shall not make reference to the amount of alcoholic beverages available. This includes references to kegs or open bars.
 5. Must adhere to University posting policy guidelines.
- (f) Florida State University Police shall be notified of all on campus events that are not regularly scheduled that plan to serve alcohol.
- (g) Laws and Regulations: All members of the campus community (students, faculty, staff, alumni, and guests) must adhere to all applicable federal or state laws, local ordinances, and University regulations related to the sale and use of alcohol. They include, but are not limited to the following:
1. It is unlawful for any person to aid or abet an underage person, as defined by Section 1 (a), in the purchase or attempt to obtain alcoholic beverages.
 2. It is unlawful for any underage person to falsify a driver's license or other identification document in order to obtain or attempt to obtain alcoholic beverages.
 3. It is unlawful for any person to permit use of his/her driver's license or any other identification document by an underage person to purchase or attempt to purchase alcoholic beverages.
 4. No person may bring any type of alcoholic beverage into a licensed facility or area, nor may any person take alcoholic beverages out of the licensed facility or area, except that a bottle of wine purchased, but not fully consumed, at the University Center Club or similar restaurant establishment on campus may be removed by the person after it has been recorked as allowed by law.
 5. Transportation of all alcoholic beverages on campus shall be in unopened and unobservable containers.
 6. Damage to or destruction of property, or injury to person(s), which is caused by or can be shown to be related to the consumption of alcohol will be subject to disciplinary action, as will any other violation of this rule.

II. Guidelines for University Sponsored Events.

Definition: Large public and formal events where the University acts in symbolic ways to honor, celebrate, and reward achievements central to its mission (e.g., graduation, convocation, dedications, awards, ceremonies). These events convey important values about what is central to the University. Florida State University is concerned with the image conveyed when alcohol service is included as part of these events.

All University Sponsored Events are subject to the guidelines outlined in Section I of the alcohol policy. In addition, the following restrictions apply;

- (a) Alcohol will not be served at any reception or other function, as defined above, sponsored by the University or taking place on the University campus where attendance is essentially open to the public and is not controlled by such means as individual invitation, registration, reservation and/or a fee payment process.
- (b) At those functions where attendance will be predominately alumni and friends of the University, and controlled by individual invitation, registration, reservation, or a fee payment process, alcoholic beverages may be served with the following restrictions:
 1. All persons will be required to show identification, including birth date, to ensure that they are a minimum of 21 years of age in the state of Florida;
 2. The right to refuse to serve anyone who seems to be in danger of over consumption will be reserved and used; and
 3. An ample supply and variety of food and non-alcoholic beverages will be available.
- (c) At University sponsored functions where attendance will be predominately students, no alcoholic beverages will be served, regardless of the degree of control exercised over attendance.

III. Guidelines for University Related Events.

Definition: Any organization or group, consisting primarily of Florida State University students, employees, faculty or alumni, and/or which utilizes the Florida State University name or its premises, in which alcohol is served, must adhere to the following guidelines. These guidelines apply to all student organizations, whether or not they have received formal recognition or not.

All University Related Events, on or off campus, are subject to the guidelines outlined in Section I of the alcohol policy. In addition, the following apply;

- (a) Sponsors are required to provide one or more alternative non-alcoholic beverage available in sufficient quantity throughout the event.
- (b) Non-alcoholic beverages must be available at the same place as the alcoholic beverages and featured as prominently as the alcoholic beverages.
- (c) If the alcoholic beverage is being sold, the alternative beverage should be available at a price equal to or less than the price of the alcohol being provided.
- (d) Wherever alcohol is present, food must also be in sufficient quantity throughout the event.
- (e) The cost of admission to an event may not include or cover the cost of alcoholic beverages.
- (f) No state appropriated, federal funds or A & S fees may be used to purchase or sell alcohol.
- (g) The burden of proof for showing legal age is placed upon the person desiring alcohol service. No service will be provided unless clear evidence of legal age is presented. Those of legal age and consuming alcohol will be identified by wrist bands, hand stamps, etc.
- (h) It is the responsibility of the serving establishment, at the time that an alcoholic beverage is requested, to check the picture ID. If, for any reason, proof of legal drinking age cannot be provided upon request, it is the responsibility of the server to deny the request.
- (i) At social functions where alcoholic beverages are served, direct access should be limited to a person(s) designated as the server(s) by a licensed insured vendor. Servers must not consume alcohol during the event.
- (j) The server shall refuse to serve anyone who seems to be in danger of over consumption will be reserved and used.

Any organization found not to be in compliance with the University alcohol policy at their event may be subject to University disciplinary action and may forfeit its right to any fee support from the University.

IV. Tailgate Events.

Definition: Gatherings occurring in the designated parking areas surrounding the area of Doak Campbell Stadium prior to and after scheduled football games.

- (a) Florida State University does not support or condemn the consumption of alcohol by individuals 21 years of age or older at tailgate events.
- (b) Florida State University does not condone any act related to excessive consumption of alcohol that impairs, interferes, or endangers the safety or enjoyment of anyone attending these events, including the individual who chooses to consume alcohol.
- (c) Individuals who choose to consume alcohol are responsible for their behavior and should not operate a motor vehicle after they have consumed alcohol.

V. Administration and Enforcement of Policy.

- (a) The Vice President for Faculty Development and Advancement is the responsible University official for administration of the alcohol policy for all events involving primarily faculty. The Vice President for Student Affairs is the responsible administrator for students and student groups. The Vice President for University Relations is the responsible University official for administration of the alcohol policy for events managed by the direct support organizations and for those involving all other groups and individuals. Changes and revisions shall be coordinated by the Vice President for Student Affairs in consultation with other Vice Presidents and the General Counsel, subject to final approval of the President of the University.
- (b) Enforcement of the alcohol policy shall reside in the Office of Student Rights and Responsibilities for individual student and student organization cases, and the Office of Faculty Development and Advancement for faculty related violations. Enforcement of the alcohol policy for all other groups, including outside groups, organizations, and individuals shall reside in the Vice President for University Relations.
- (c) The University maintains the right to forward possible violations of federal or state laws, local ordinances, and University regulations, to the proper authorities through the Florida State University Police Department.

VI. Health Risks.

Alcohol consumption may cause a number of changes in behavior which are related to dose, rate of intake, body size and percentage of body fluid, expectations, social environment, physical conditions (disease or, more commonly, hormonal cycles can be factors), enzyme differences, and concentration of alcohol in a drink. It may increase aggressiveness, lower inhibitions, cloud judgment, reduce resistance, and hamper the ability to make decisions.

Alcohol first affects the area of the brain responsible for higher functions, such as decision-making and social inhibitions, suppressing an individual's self-control. Alcohol in the blood can slow reaction time, reduce muscle coordination and impair eyesight, contributing to deficits in performance, judgment, memory, and motor skills. Even low doses can significantly impair the judgment and coordination required to drive a car safely. Florida State University reiterates that no one should ever drink alcohol and drive. The designated driver should never drink alcohol.

Moderate to high doses of alcohol may cause marked impairments in higher mental functions, altering a person's ability to learn and remember information. Very high doses cause respiratory depression and death. If combined with other depressants of the central nervous system, much lower doses of alcohol may produce the effects just described above.

VII. Educational Resources and Support.

In support of responsible management of alcohol, the University provides numerous resources and support services available to students, faculty, and staff of Florida State University, including alcohol education, counseling, treatment, rehabilitation, re-entry, prevention, and intervention, as well as other educational programs and volunteer opportunities. Below are just a few of these resources and services.

Services

- (a) The University Counseling Center (UCC) provides a structured two-session Alcohol and Other Drug (AOD) Evaluation for students who are sanctioned by the University for violations of the University's alcohol and drug policy. In addition to mandated AOD sessions, AOD Evaluations are available on a voluntary basis to all FSU students. Following the AOD Evaluation sessions, a recommendation is made to the student regarding need for counseling treatment. Counseling treatment is provided to students on a voluntary basis only. Any fee-paying student currently enrolled

at Florida State University is eligible for services at the UCC. Please contact the University Counseling Center for a current fee schedule [644-2003; Web site is <http://www.counseling.fsu.edu>].

- (b) FSU Police Department [644-1234; Web site is <http://www.police.fsu.edu/>].
- (c) Office of Residence Life [644-2860; Web site is <http://housing.fsu.edu/>].
- (d) The Employee Assistance Program (EAP) at Florida State University was established to assist employees with behavioral, medical and substance abuse problems affecting employment. Employees can enter the program through a self-referral or supervisory referral. The EAP functions as a coordinator of counseling and other appropriate services available both within the University and the community [644-2288; Web site is <http://www.eap.fsu.edu>].
- (e) Counseling services are also provided for students, staff, faculty, and the community by the Center for Couple & Family Therapy (CCFT), which fees are based on annual income [644-1588; Web site is <http://ccft.fsu.edu/>].
- (f) The Human Services Center is a training clinic within the College of Education. Counselors are graduate students with counseling majors who offer service for students, staff, faculty, and the community. Services are free [644-3857; Web site is <http://education.fsu.edu/centers-institutes/human-services-center-hsc>].
- (g) The Psychology Clinic is also a training clinic. Counselors are graduate students in clinic psychology programs. They provide one-on-one psychology services (no support groups) to students, staff, faculty, and the community. Fees are based on a sliding scale [644-3006; Web site is <http://www.psy.fsu.edu/community/clinic>].
- (h) Helpline 211 is a telephone counseling and referral service for short term counseling, information and referrals mainly for social services in the Big Bend area [(877) 211-7005, (850) 224-6333, 211; Web site is <http://www.211bigbend.org>].

Education

- (a) The Learning Resources Center of the College of Nursing has books, slides and videotapes on alcohol and other substances which are available to instructors in the College of Nursing. All other staff or faculty would need approval from the Dean of the College of Nursing to access these resources [644-1291]. More information is available at <http://nursing.fsu.edu/>.
- (b) Center for Health Advocacy and Wellness (CHAW)s at University Health Services [644-8871; Web site is www.chaw.fsu.edu].
- (c) SMART (Students Making Alcohol and Other Drug Responsibility Theirs (SMART) Choices consists of two, two-hour class sessions and an interactive online program at University Health Services that presents the legal and personal consequences of substance abuse. The purpose of the course is to introduce the student to a process of self-examination that may lead to improved decision making and behavior change. Students who are sanctioned by the Office of Investigations & Assessment [644-2428, Dean of Students Department] or University Housing [644-2860] for on or off-campus violations of the University's alcohol and drug policy must complete the course. Students may also enroll in the course free of charge if they would simply like to gain more knowledge about alcohol. Students may contact the Center for Health Advocacy and Wellness [644-8871 chaw.fsu.edu] to sign up.
- (d) AlcoholEdu: An interactive, two-part on-line program designed to help you make healthy and safe decisions around alcohol use while in college. [<https://healthycampus.fsu.edu/for-students/new-student-requirements>]
- (e) Healthy Noles: Volunteer opportunities for students seeking to work toward greater alcohol responsibility are available through Healthy Noles, which is an organization directed by the Center for Health Advocacy and Wellness at University Health Services. The Healthy Noles advocate for wellness on campus and alcohol responsibility is a significant component. For more information, contact the Center for Health Advocacy and Wellness [644-8871; or for more information visit <http://healthycampus.fsu.edu/for-students/get-involved>].
- (f) Collegiate Recovery Community: Florida State University's Collegiate Recovery Community is here to help students in recovery thrive during their college experience. Our goal is to provide a place for accountability within a healthy community

and a place to have fun, socialize, and develop friendships with like-minded students. Website: <https://chaw.fsu.edu/services/collegiate-recovery-community>

- (g) The Digital Media Center provides media resources, which include listings on alcohol topics, to all campus approved departments and organizations. There is no charge for this service when it is used for regularly scheduled classes [644-5924].

Florida State University State and Local Penalties

Common Alcohol Offenses (Leon County)	Typical Penalty First Offense	Maximum Penalty First Offense
Possession or attempt to purchase alcohol by a person under 21 years of age.	Diversion program; \$180 fine; 10 hours community work program.	60 days jail; \$500 fine.
Using a false driver's license ID or allowing someone to use your driver's license for an ID card.	Diversion program; \$180 fine; 10 hours community work program.	60 days jail; \$500 fine.
Providing alcohol to a person under 21.	Diversion program; \$180 fine; 10 hours community work program.	60 days jail; \$500 fine.

Note: These are only for information. State sanctions are subject to change by the Florida Legislature.

Florida State University Health Risks of Illicit Drugs

Illicit drugs all have some health-threatening qualities—some more than others. Examples include increased heart rate and lung damage from marijuana; central nervous system disorders from cocaine, heroin, and hallucinogens; and liver, lung and kidney damage from inhalants. HIV infection also is spread widely among intravenous drug users. Even infrequent use of illicit drugs can result in physical afflictions, such as hangovers, cardiovascular damage, digestive problems, tremors, impaired sexual response, and injuries due to lost coordination. Other possible effects include reduced alertness and impaired performance at school or work, interpersonal conflicts, and financial difficulties. Dependence and addiction are constant threats to users of illicit substances. Regular abuse of these substances generally exposes users to criminal elements, which may lead to involvement in further criminal activities.

Florida State University Illicit Drug Penalties

The penalty for possession (second-degree misdemeanor) is sixty days jail and \$500 fine. Penalties for trafficking (first-degree felony) range up to thirty years imprisonment and fines of \$500,000.

Note: These are only for information. State sanctions are subject to change by the Florida Legislature.

Florida State University Standards of Conduct

State of Florida statutes declare that it is unlawful for any person under 21 years of age to consume or possess alcoholic beverages. Consequently, no one under the legal drinking age may consume, distribute, or possess alcohol on University properties or as part of any University activity.

It is unlawful to sell, give, serve, or permit to be served alcoholic beverages to a person under 21 years of age. Furthermore, servers can be held civilly liable for damage caused by underage drinkers to whom they provided alcoholic beverages.

It is unlawful to be under the influence of, to use, possess, distribute, sell, offer, or agree to sell, or represent to sell, narcotics, hallucinogens, dangerous drugs, or controlled substances, except as where permitted by prescription or law.

Florida State University Use of Social Security Numbers

In accordance with *Florida Statute 119.071(5)*, students and employees should be aware that Florida State University collects and uses social security numbers for the purpose of performing certain University duties and responsibilities as follows:

- Certain aspects of employment related to federal tax reporting, generation and reporting of I-9 documents, direct deposit, insurance policies, retirement benefits, state and federal reporting requirements;

- Identification and verification of student records, including admission, registration, financial aid, and academic records, as well as verification of identity in connection with the provision of the University's services;
- State and federal reporting of student data as required by law;
- Release to contracted vendors for the purposes of state and federal reporting or provision of contracted services for the faculty, staff, and students of the University;
- Release to commercial entities engaged in the performance of a commercial activity provided the social security numbers will be used only in the performance of a commercial activity and provided the commercial entities make a written request for the social security numbers conforming to the requirements of *Section 119.071(5)(a)7b. (I)-(IV), Florida Statutes*.
- Release to the Florida Board of Governors as follows:
 - When necessary for the performance of the Board's constitutional duties and responsibilities, including but not limited to:
 - Collection of student and employee data from state universities. [Authorized by *Sections 483 and 484 of the Higher Education Act of 1965, Art. IX, s. 7, Fla. Const., Board Regulation 3.007, Fla. Stat. § 1001.706(5)(d), Fla. Stat. § 1008.31(3), and Fla. Stat. § 119.071(5)(a)6]*
 - In conjunction with tort claims and tort notices of claim against the Board of Governors [Required by Fla. Stat. § 768.28(6), and Fla. Stat. § 119.071(5)(a)]
 - When the disclosure of the social security number is expressly required by federal or state law or a court order [Authorized by Fla. Stat. § 119.071(5)(a)6]
 - When the individual expressly consents in writing to the disclosure of his or her social security number [Authorized by Fla. Stat. § 119.071(5)(a)6]

The University does not use social security numbers for student identification; instead the University creates a unique identifier for each student called the EMPLID.

Notification of Students' Rights under FERPA

The **Family Educational Rights and Privacy Act (FERPA)** affords students certain rights with respect to their education records. These rights are:

1. The right to inspect and review the student's education records within forty-five days of the day the University receives a request for access. Students should submit to the registrar, dean, or head of the academic department (or appropriate official) written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes is inaccurate or misleading. Students may ask the University to amend a record that they believe is inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is defined as a person employed by the University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional

responsibility. Upon request, the University discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, S.W.
Washington, DC 20202-4605

Students have the right to obtain a copy of Florida State University's student record policy. You can obtain a copy of the policy from the Office of the University Registrar, *A3900 University Center, Florida State University, Tallahassee, FL 32306-2480*.

Note: Under Federal Statute, the University is authorized to and may release records to other institutions without notification to the student, when the student is applying for admission.

Release of Student Information

The disclosure or publication of student information is governed by the policies of Florida State University and the State of Education within the framework of state and federal laws, including the Family Educational Rights and Privacy Act of 1974.

The written consent of the student is required for the disclosure or publication of any information that is: (1) personally identifiable of the student and (2) a part of the educational record. Certain exceptions to that generality, both in types of information that can be disclosed and in access to that information, are allowed within the regulations of the Family Educational Rights and Privacy Act, as described in the following paragraphs:

- A. Subject to statutory conditions and limitations, prior consent of the student is not required for disclosure of information in the educational record to (or for):
1. Officials of the University with a legitimate educational interest. A school official is defined as a person employed by the University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his/her professional responsibility;
 2. Certain government agencies;
 3. Accrediting organizations;
 4. Certain financial aid matters;
 5. Certain research circumstances;
 6. Health and safety emergencies;
 7. A court pursuant to order or subpoena, so long as the student is notified in advance of the University's compliance; and
 8. As otherwise provided by law.
- B. Subject to statutory conditions and limitations, prior consent of the student is not required for disclosure of certain types of information for:
1. Portions of the educational record for which the student has signed a waiver;
 2. Portions of the educational record that are exempted by law including records of law enforcement agencies of the University; employment records of the student within the University as long as the student's employment is not predicated upon his or her status as a student; personal records of instructional, supervisory, or administrative personnel; and alumni records related to that student; and
 3. Records transmitted to another school or school system in which the student seeks or intends to enroll, since the University generally forwards these on request.

Note: More specific information regarding such exempted information can be obtained by contacting the Office of the University Registrar, *A3900 University Center*. For the complete text of the applicable statutes refer to

Section 1006.52, Florida Statutes, 20 U.S.C. 1232g, and 34 C.F.R. §99.1, et seq. or write the U.S. Department of Education at *600 Independence Ave., S.W., Washington, D.C. 20202*.

- C. **Prior consent of the student is not required** for disclosure of portions of the educational record defined by the institution as "Directory Information," which may be released via official media of the University:

1. Name, date, and place of birth;
2. Local address;
3. Permanent address;
4. EMPLID;
5. Classification;
6. Major field of study;
7. Participation in official University activities and sports;
8. Weight and height of members of athletic teams;
9. Dates of attendance at the University;
10. Degrees, honors, and awards received;
11. The most recently attended educational institution; and
12. Digitized photo (Florida State University Card).

Important: The information above, designated by the University as "Directory Information," may be released or published by the University without prior written consent of the student unless exception is made in writing by the student.

Request to Prevent Publication of Directory Information

Students may inform the University in writing of the student's desire to prevent publication of such "Directory Information" or release of such information except as required by law. Appropriate forms for such action are made available by the Office of the University Registrar.

Caution: Until the University can develop the necessary sophistication in our data systems, a student's request to prevent the release of publication of some of the items of "Directory Information" may result in preventing the publication of all items on that list, including graduation lists, honors, and award lists. The student can help avoid such errors with a gentle reminder to the Office of the University Registrar.

For complete information related to the policies outlined above or concerning the procedures regarding waivers and consent forms, or to challenge the accuracy of the educational record, please contact: *Office of the University Registrar, A3900 University Center, Florida State University, Tallahassee, FL 32306-2480*.

Policy for the Use of Photographs and Videos in University Publications

Florida State University randomly and routinely photographs and makes videos on the main campus, branch campuses, and the international and departmental programs for educational and promotional purposes. These photographs and videos appear in official University publications and materials, which include but are not specifically limited to, *General Bulletin* (undergraduate and graduate), *Registration Guide*, Office of Admissions brochures, international program materials, departmental and college brochures, University Web sites, and other University information publications. For further information contact Media Relations at (850) 644-4030.

Illegal Downloading of Copyrighted Songs and Movies

Downloading and distribution of copyrighted music, movie and other entertainment files from online distribution sites that offer these items **free of charge** is illegal, in direct violation of the federal Digital Millennium Copyright Act, the Florida State University Student Conduct Code, and the Florida State University Policy OP-H-6 "Use of University Information Technology Resources."

Illegal downloading and file sharing of copyrighted music, movies or other entertainment files is intellectual property/copyright infringement. Illegal downloading and file sharing activities maliciously expose the University's network, computing systems and personal computers to destructive computer malware (viruses, spyware, worms, trojan horses, rootkits, keystroke loggers, etc.), and denial of service attacks. Illegal downloading activity significantly increases the risk of exposure to personal identity theft and irreparable or costly damage to both University and personally owned computing devices.

The potential consequences of illegal downloading and file sharing are extremely serious. There are both civil and criminal penalties for illegal downloading and file sharing:

- In a civil suit, an infringer may be liable for a copyright owner's actual damages plus any profits made from the infringement. Alternatively, the copyright owner may avoid proving actual damage by electing a statutory damage recovery of up to \$30,000 or, where the court determines that the infringement occurred willfully, up to \$150,000. The actual amount will be based upon what the court in its discretion considers just. See 17 U.S.C. § 504.
- Penalties to be applied in cases of criminal copyright infringement [i.e., violations of 17 U.S.C. § 506(a)], are set forth at 18 U.S.C. § 2319. Congress has increased these penalties substantially in recent years, and has broadened the scope of behaviors to which they can apply. Statutory penalties are found at 18 U.S.C. § 2319. A defendant, convicted for the first time of violating 17 U.S.C. § 506(a) by the unauthorized reproduction or distribution, during any 180-day period, of at least ten copies or phonorecords, or one or more copyrighted works, with a retail value of more than \$2,500 can be imprisoned for up to five years and fined up to \$250,000, or both. 18 U.S.C. §§ 2319(b), 3571(b)(3).
- Defendants who have previously been convicted of criminal copyright infringement under 18 U.S.C. § 2319(b)(1) may be sentenced to a maximum of ten years imprisonment, a \$250,000 fine, or both. Finally, a defendant is guilty of a misdemeanor violation if he violated rights other than those of reproduction or distribution, or has reproduced or distributed less than the requisite number of copies, or if the retail value of the copies reproduced or distributed did not meet the statutory minimum, or if other elements of 17 U.S.C. § 506(a) are not satisfied. Misdemeanants can be sentenced a maximum of one year and can be fined a maximum of \$100,000. See 18 U.S.C. §§ 2319(b)(3), 3571(b)(5).

Law firms representing the entertainment industry aggressively investigate instances of music and movie "pirating", and upon identifying the offenders, are increasingly invoking the applicable laws to reap financial settlements and awards totaling thousands of dollars.

The University is not legally empowered to protect, represent, advise or otherwise assist students who become subject to legal proceedings because of copyright infringement. Students who are sued, offered an out-of-court settlement, or cited for criminal copyright infringement must obtain their own legal representation.

In addition to civil and criminal penalties, violators will be subject to the University's disciplinary proceedings:

- **Student Conduct Code** (<https://dos.fsu.edu/srr/conduct-codes/student-conduct-codes/>): A student found to be in violation of provision (5)(c)1 is subject to the sanctions defined in Section (9). Examples of sanctions that may be imposed for violations of the Student Conduct Code include reprimand, service hours, probation, suspension, and dismissal.
- **Florida State University Policy OP-H-6 "Use of University Information Technology Resources"** (<http://policies.vpfa.fsu.edu/policies-and-procedures/technology/>): A student found to be in violation of provision C.1.a (11) may lose University computer privileges as defined in paragraph F.2.

For further information regarding the downloading of electronic objects and media, please visit: <http://igs.fsu.edu/copyright-information/policy>.

General Bulletin Statement of Purpose and Notice

This *General Bulletin* is not a contract, either expressed or implied, between the University and the student, but represents a flexible program of the current curriculum, educational plans, offerings, and requirements that may be altered from time to time to carry out the administrative, academic, and procedural purposes and objectives of the University. The University specifically reserves the right to change, delete, or add to any provision, offering, academic curriculum, program, or requirement at any time within the student's period of study at the University. The University further reserves the right to withdraw a student from the University for cause at any time. Students are on notice that admission to the University or registration for a given semester does not guarantee the availability of a course at any specific time. Likewise, admission to the University or registration for a given program of study within the University, or a department or college of the University, is not a guarantee of a degree or of certification in a program.

UNIVERSITY CALENDAR

Opening and Closing Dates

	2020
Fall	August 24–December 11
Homecoming	October 18–24
	2021
Spring	January 6–April 30
Spring Break	March 15–March 19
	2021
12 Week Session (A)	May 10–July 30
First 6 Week Session (B)	May 10–June 18
Second 6 Week Session (C)	June 21–July 30
8 Week Session (F)	May 10–July 2
Law 8 Week Session (LW8)	May 3–June 25

For extended dates, see the Extended Calendar available online at <http://registrar.fsu.edu>.

Legal Holidays (No Classes)

	2020
Labor Day	Monday, September 7
Veteran’s Day	Wednesday, November 11
Thanksgiving Day	Thursday, November 26
Friday after Thanksgiving	Friday, November 27
Christmas Day	Friday, December 25
	2021
New Year’s Day	Friday, January 1
Martin Luther King, Jr. Day	Monday, January 18
Memorial Day	Monday, May 31
Independence Day	Sunday, July 4

For registration dates, see the *Registration Guide* available online at <http://registrar.fsu.edu>.

Admission/Readmission/Non-Degree/Transient Application Deadlines*

	Fall 2020	Spring 2021	Summer 2021
Undergraduate			
Freshman	November 1	The University does not typically accept first year in college applications for the Spring term.	November 1
Transfer	June 1	November 1	March 1
Graduate ¹	July 1	November 1	March 1
Readmission			
Undergraduate	June 1	November 1	March 1
Graduate ¹	July 1	November 1	March 1
Non-Degree			
Undergraduate	August 1	December 1	April 1
Graduate	August 1	December 1	April 1
Transient Student			
Undergraduate ²	August 1	December 1	April 1
Graduate	August 1	December 1	April 1

¹ Many graduate programs have earlier deadlines than the University-wide published dates. Contact the individual program or department for the applicable admission deadline. Programs that use the University-wide dates may have earlier deadlines for financial-award consideration.

² Includes the Florida Agricultural and Mechanical University/Florida State University Interinstitutional Registration Program.

*All information used to make an admission decision must be received by the published deadline. If the University deadline falls on a weekend, applicants have until the following Monday to submit applications and all supporting documents. Additionally, the University reserves the right to close admission earlier if warranted by enrollment limitations. Deadlines for applications and supporting documents at the FSU Panama City Campus are typically one month prior to the start of each term. Further information on the Panama City campus is available at <http://www.pc.fsu.edu>.

ACADEMIC DEGREE AND CERTIFICATE PROGRAMS

Legend:

B —Bachelor’s Degree	M —Master’s Degree	A —Advanced Master’s	S —Specialist	D —Doctoral Degree	JD —Juris Doctor	MD —Doctor of Medicine
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Florida State University offers degree programs through the following colleges, schools, or divisions. Consult the college for currently active programs.

College of Applied Studies:

<http://pc.fsu.edu/academics/college-applied-studies>

Regular Degree Programs

Law Enforcement Intelligence		M
Nurse Anesthesia		M
Professional Communication	B	M
Public Safety and Security	B	
Recreation, Tourism, and Events	B	

Combined Bachelor’s/Master’s Pathway

Professional Communication	BS/MS
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Certificate Programs

Certificate in Special Events, Undergraduate
 Certificate in Law Enforcement Intelligence, Graduate
 Certificate in Underwater Crime Scene Investigation, Undergraduate/Graduate

College of Arts and Sciences:

<http://artsandsciences.fsu.edu/>

Regular Degree Programs

Actuarial Science	B		
Anthropology	B	M	
Biochemistry	B		
Biological Sciences	B	M	D
Biostatistics		M	D
Chemical Science	B		
Chemistry	B	M	D
Classics	B	M	D
Computational Biology	B		
Computational Science	B	M	D
Computer Science	B	M	D
Creative Writing		M	
Cyber Criminology	B		
East Asian Languages and Cultures	B	M	
English	B	M	D
Environmental Science	B		
French	B	M	D
Geology	B	M	D
German	B	M	
Greek	B	M	
History	B	M	D
History and Philosophy of Science		M	
Interdisciplinary Humanities	B		
Italian	B		
Italian Studies		M	
Latin	B	M	

Mathematics	B	M	D
Meteorology	B	M	D
Middle Eastern Studies	B		
Molecular Biophysics			D
Neuroscience	B		D
Oceanography		M	D
Philosophy	B	M	D
Physical Environmental Sciences			D
Physical Science	B		
Physics	B	M	D
Psychology	B	M	D
Religion	B	M	D
Russian	B		
STEM Teaching		M	
Slavic		M	
Spanish	B	M	D
Statistics	B	M	D

Combined Bachelor’s/Master’s Pathways

Biological Sciences	BS/MS
Computer Science	BS/MS
Cyber Criminology/Computer Science	BS/MS
Mathematics	BS/MS
Statistics	BS/MS
Statistics/Biostatistics	BS/MS

Joint Graduate pathways

Oceanography: Aquatic Environmental Science and Law	MS/JD
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Certificate Programs

Certificate in Publishing and Editing (English), Graduate
 Certificate in SAS Programming and Data Analysis (Statistics), Undergraduate/Graduate
 Certificate in Bioethics, Graduate

College of Business:

<http://business.fsu.edu/>

Regular Degree Programs

Accounting	B	M	
Business Administration	B	M	D
Business Analytics		M	
Finance	B	M	
Management	B	M	
Management Information Systems	B	M	
Marketing	B		
Real Estate	B		
Risk Management and Insurance	B	M	

Combined Bachelor's/Master's Pathways

Accounting	BS/MAcc
Finance	BS/MBA
Finance	BS/MSF
Human Resources Management	BS/MBA
Management Information Systems	BS/MBA
Management Information Systems	BS/MS-MIS
Marketing	BS/MBA
Real Estate	BS/MBA
Real Estate/Finance	BS-RE/MSF
Risk Management and Insurance	BS/MBA
Risk Management and Insurance	BS/MS-RMI

Joint Graduate Pathways

Business Administration/Law	MBA/JD
Business Administration/Social Work	MBA/MSW

College of Communication and Information:<https://cci.fsu.edu/>**Regular Degree Programs**

Communication				D
Communication and Digital Media Studies	B	M		
Communication Science and Disorders	B	M		D
Information		M	S	D
Information Technology	B	M		
Professional Communication	B	M		

Combined Bachelor's/Master's Pathways

Communication and Digital Media Studies	BS/MS, BA/MA
Information Technology	BS/MS
Professional Communication	BS/MS, BA/MA

Joint Graduate Pathways

Information and Law	MS/JD
Information Technology and Law	MS/JD

Certificate Programs

Certificate in Communication Science and Disorders, Graduate
 Certificate in Developmental Disabilities, Undergraduate, Interdisciplinary
 Certificate in Digital Video Production, Graduate
 Certificate in Health Information Technology, Undergraduate/Graduate
 Certificate in Information Architecture, Graduate
 Certificate in Information Leadership and Management, Graduate
 Certificate in Multicultural Marketing Communication, Undergraduate/Graduate
 Certificate in Project Management, Graduate
 Certificate in Reference Services, Graduate
 Certificate in School Librarian Leadership, Graduate
 Certificate in Youth Services, Graduate

College of Criminology and Criminal Justice:<http://www.criminology.fsu.edu/>**Regular Degree Programs**

Criminology	B	M	D
Cyber Criminology	B		

Combined Bachelor's/Master's Pathway

Criminology and Criminal Justice	BS/MS
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Joint Graduate Pathways

Criminology and Public Administration	MS/MPA
Criminology and Social Work	MS/MSW

Dedman School of Hospitality:<http://dedman.fsu.edu/>**Regular Degree Programs**

Hospitality and Tourism Management	B			
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College of Education:<http://education.fsu.edu/>**Regular Degree Programs**

Counseling and Human Systems		M*	S	
Counseling Psychology and Human Systems				D
Curriculum and Instruction		M	S	D
Educational Leadership and Policy		M	S	D
Educational Psychology		M	S*	D
Foundations of Education		M		D
Higher Education		M	S*	D
Instructional Systems and Learning Technologies		M		D
Measurement and Statistics		M		D
STEM Teaching	B			
Sport Management	B	M		D
Elementary Education**	B			
English Education**	B			
Social Science Education**	B			
Special Education**	B			
Visual Disabilities**	B	M		D

* No direct admission into the program.

** Bachelor's must be completed in combination with master's to meet teacher certification requirements.

Combined Bachelor's/Master's Pathways

Elementary Education	BS/MS
English Teaching	BS/MS
Social Science Teaching	BS/MS
Special Education Teaching	BS/MS
Visual Disabilities	BS/MS

Joint Graduate Pathways

Law and Sport Management	JD/MS
Law and Sport Management	JM/MS

Certificate Programs

Certificate in Athletic Coaching, Graduate
 Certificate in Autism Spectrum Disorder, Graduate
 Certificate in Educational Leadership/Administration - Modified Program, Graduate
 Certificate in Human Performance Technology, Graduate
 Certificate in Institutional Research, Graduate
 Certificate in Leadership Studies, Undergraduate
 Certificate in Measurement and Statistics, Graduate
 Certificate in Online Instructional Development, Graduate
 Certificate in Online Teaching and Learning, Graduate
 Certificate in Program Evaluation, Graduate

Certificate in Teaching English as a Second Language (TESOL),
Undergraduate/Graduate

FAMU-FSU College of Engineering:

<http://eng.famu.fsu.edu/>

Regular Degree Programs

Biomedical Engineering	B	MS*	M	D
Chemical Engineering	B	MS*	M	D
Civil Engineering	B	M. Eng**	M	D
Environmental Engineering	B/Enviro***			
Computer Engineering	B			
Electrical Engineering	B	MS*	M	D
Industrial Engineering	B		M	D
Engineering Management		MS*		
Mechanical Engineering	B	MS*	M	D
Systems Engineering		MS*		
Sustainable Energy			M	

* Master of Science (non-thesis)

** Master of Engineering (non-thesis)

*** Bachelor of Science in Civil Engineering with Environmental Engineering Major

Combined Bachelor's/Master's Pathways

Chemical Engineering	BS/MS
Chemical and Biomedical Engineering	BS/MS
Civil and Environmental Engineering	BS/M.Eng
Chemical and Environmental Engineering	BS/M.Eng
Electrical Engineering	BS/MS
Industrial Engineering	BS/MS
Mechanical Engineering	BS/MS

College of Fine Arts:

<http://cfa.fsu.edu/>

Regular Degree Programs

Art Education		M	S	D
Art Therapy		M*		
Arts Administration		M*		
Dance	B	M		
History and Criticism of Art	B	M		D
Interior Architecture and Design	B	M		
Studio Art	B	M		
Theatre	B	M		D

* Offered jointly by the College of Music and the College of Fine Arts.

Combined Bachelor's/Master's Pathways

Art Education	BA/MA
Dance	BFA/MA
Interior Architecture and Design	BS/MS
Museum and Cultural Heritage Studies	BA/MA

Certificate Programs

Certificate in Museum Education and Visitor-Centered Exhibitions, Graduate

The Graduate School

Regular Degree Programs

Materials Science and Engineering	M	D
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Certificate Programs

Certificate in Preparing Future Faculty, Graduate

Certificate in Preparing Future Professionals, Graduate

College of Human Sciences:

<https://humansciences.fsu.edu>

Regular Degree Programs

Athletic Training	B		
Dietetics	B		
Exercise Physiology	B	M	D
Family and Child Sciences	B	M	
Food and Nutrition	B	M	
Human Sciences			D
Marriage and Family Therapy			D

Combined Bachelor's/Master's Pathway

Exercise Physiology	BS/MS
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Jim Moran College of Entrepreneurship

<http://jimmorancollege.fsu.edu>

Regular Degree Programs

Entrepreneurship	B	M	
Retail Entrepreneurship	B	M	

College of Law:

<http://www.law.fsu.edu/>

Regular Degree Programs

American Law for Foreign Lawyers	M	
Business Law	M	
Environmental Law and Policy	M	
Juris Master	M	
Juris Doctor		JD

Joint Graduate Pathways

Business Administration and Law	MBA/JD
Information and Law	MS/JD
Information Technology and Law	MS/JD
International Affairs and Law	MS/JD
Oceanography: Aquatic Environmental Science and Law	MS/JD
Public Administration and Law	MPA/JD
Social Work and Law	MSW/JD
Sport Management and Law	MS/JD
Urban and Regional Planning and Law	MSP/JD

Certificate Programs

Certificate in Business Law, Graduate

Certificate in Environmental, Natural Resources, and Land Use Law, Graduate

Certificate in Financial Regulation and Compliance, Graduate

Certificate in International Law, Graduate

College of Medicine:

<http://med.fsu.edu/>

Regular Degree Programs

Biomedical Sciences		M	D
Interdisciplinary Medical Sciences	B		
Medicine			MD
Neuroscience			D
Physician Assistant Studies		M	

College of Motion Picture Arts:<http://film.fsu.edu/>**Regular Degree Programs**

Motion Picture Arts	B	M	
Motion Picture Arts Writing			M
Animation and Digital Arts	B		

College of Music:<http://music.fsu.edu/>**Regular Degree Programs**

Arts Administration		M ¹	
Music Composition	B	M	D
Music Education	B	M	D
Music Performance	B	M	D
Music Theory and Composition	B	M	D
Music Therapy	B	M	
Music-Liberal Arts	B	M	
Musicology		M	D
Opera Production		M	

* Offered jointly by the College of Music and the College of Fine Arts.

College of Nursing:<http://nursing.fsu.edu/>**Regular Degree Programs**

Nursing	B		
Doctor of Nursing Practice			D

Certificate Programs

Certificate in Nursing Leadership, Graduate

Certificate in Psychiatric Mental Health Nurse Practitioner, Graduate

College of Social Sciences and Public Policy:<http://www.coss.fsu.edu/>**Regular Degree Programs**

African American Studies	B		
Applied Economics		M	
Asian Studies	B	M	
Demography		M	
Economics	B	M	D
Environment and Society	B		
Geographic Information Science		M	
Geography	B	M	D
International Affairs	B	M	
Latin American and Caribbean Studies	B		
Political Science	B	M	D
Public Administration		M	D
Public Health	B	M	
Russian and East European Studies	B	M	
Social Science	B		
Sociology	B	M	D
Urban and Regional Planning		M	D

Combined Bachelor's/Master's Pathways

Applied American Politics and Policy	BA or BS/MS*
Demography	BA or BS/MS*
Geographic Information Science	BA or BS/MS
Public Administration	BA or BS/MPA*

Public Health	BA or BS/MPH*
Urban and Regional Planning	BA or BS/MSP*

* Open to qualified students in any undergraduate major who are accepted into the Combined Bachelor's/Master's Pathway.

Joint Graduate Pathways

International Affairs/Law	MA or MS/JD
Public Administration/Criminology	MPA/MS
Public Administration/Law	MPA/JD
Public Administration/Social Work	MPA/MSW
Public Administration/Urban and Regional Planning	MPA/MSP
Urban and Regional Planning/Demography	MSP/MS
Urban and Regional Planning/International Affairs	MSP/MS or MA
Urban and Regional Planning/Law	MSP/JD
Urban and Regional Planning/Public Health	MSP/MPH

Certificate Programs

Certificate in Application of Unmanned Aircraft Systems, Undergraduate/Graduate

Certificate in Civic and Nonprofit Leadership, Graduate

Certificate in Emergency Management, Undergraduate/Graduate

Certificate in Florida City and County Management, Graduate

Certificate in Interdisciplinary Social Sciences, Undergraduate

Certificate in Political Science, Research Intensive, Undergraduate

Certificate in Public Administration, Undergraduate/Graduate

Certificate in Public Financial Management, Graduate

Certificate in U.S. National Intelligence Studies, Graduate

College of Social Work:http://csw.fsu.edu**Regular Degree Programs**

Social Work	B	M	D
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Joint Graduate Pathways

Social Work/Business Administration	MSW/MBA
Social Work/Criminology	MSW/MS
Social Work/Law	MSW/JD
Social Work/Public Administration	MSW/MPA

Certificate Programs

Certificate in Child Welfare Practice, Undergraduate/Graduate

Certificate in Gerontology, Undergraduate/Graduate

Certificate in Leadership in Executive and Administrative Development in Social Work, Graduate

Interdisciplinary Programs**Regular Degree Programs**

African-American Studies	B		
Asian Studies	B	M	
Biostatistics		M	D
Computational Biology	B		
Computational Science	B	M	D
Cyber Criminology	B		
Environment and Society	B		
Interdisciplinary Humanities	B		
International Affairs	B	M	
Latin-American and Caribbean Studies	B		
Materials Science and Engineering		M	D

Molecular Biophysics			D
Neuroscience			D
Physical Environmental Sciences			D
Public Health	B	M	
Russian and East European Studies	B	M	
STEM Teaching	B	M	
Social Science	B		

RESEARCH FACILITIES AND SPECIAL PROGRAMS

Research and Research Facilities

Since its designation as a university in 1947, Florida State University has built a reputation as a strong center for research and creativity in the sciences, the humanities, and in the arts. During the fiscal year 2019, Florida State University's faculty generated over \$233.6 million in external funding to supplement state funds used for research and creative activities. These funds, derived through contracts and grants from various private foundations, industries, and government agencies, are used to provide stipends for graduate students, to improve research facilities, and to support the research itself.

Many members of Florida State University's faculty are renowned scholars in their fields. In the natural sciences, Florida State University is perhaps best known for its basic research programs in physics, chemistry and biochemistry, biology, psychology, meteorology, and oceanography. Its programs in materials science, high-field magnet research, superconductivity, geology, mathematics, computer science, and statistics also have strong research components, both basic and applied. Since 1982, Florida State has operated a College of Engineering as a joint program with Florida A&M University, an enterprise combining strengths in mechanical, electrical and computer, civil, environmental, chemical and biomedical, and industrial and manufacturing engineering. The Florida State University College of Medicine, founded by statute in 2000, has major research components in the biomedical and clinical sciences, family medicine and rural health, geriatrics, and medical humanities and social sciences. Finally, Florida State is pleased to continue its traditional strengths in the performing and creative arts.

Special Programs

The **National High Magnetic Field Laboratory (NHMFL)**, which opened in 1994, is the only user-facility of its kind in the Western Hemisphere. The laboratory develops and provides a variety of research magnets at the highest fields available in the world. The laboratory plays a major role in the international race to enhance scientific disciplines as diverse as biology, chemistry, engineering, geochemistry, materials science, medicine, and physics.

This unique facility supports an extensive in-house research program that advances its scientific and technical capabilities. The in-house research program is built around leading scientists and engineers who concentrate on the study of strongly correlated electron systems, molecular conductors, magnetic materials, magnetic resonance, cryogenics, and new approaches to measuring materials properties in high magnetic fields. Research at the laboratory is opening new frontiers of science at high magnetic fields, which have enormous potential for commercial and industrial applications. The laboratory also has one of the world's foremost magnet and science technology groups, which designs and builds this new generation of magnets. In 1999, the lab brought online a new 45-Tesla hybrid magnet, the most powerful steady-state magnet of its kind in the world. In 2004, the laboratory commissioned the world's first ultra-wide bore 900 MHz NMR magnet for chemical and biomedical research. Another record fell in 2005, when lab engineers completed the 35-T—the world's highest field “resistive” magnet. In 2011, a unique 25-Tesla “split magnet” was completed and put into operation. In 2015, a one-of-a-kind 21-T ion cyclotron resonance mass spectrometer was brought online at NHMFL. Recently, a unique 25-T series connected hybrid magnet, constructed in Tallahassee, was installed at the neutron scattering facility of the Helmholtz Zentrum, Berlin. Construction of a series connected hybrid magnet as well as an all-superconducting 32-T magnet has recently been completed. The former magnet is being used for NMR spectroscopy at the highest field strength yet achieved in the world. The National High Magnetic Field Laboratory has many exciting research opportunities for graduate students who wish to pursue research at the edge of parameter space in any area of science utilizing these world-class resources and instruments.

Florida State University has made major investments in faculty and infrastructure in the area of materials science and engineering. The **High Performance Materials Institute (HPMI)**, located in the new Materials Research Building, specializes in the synthesis and characterization of composite materials containing carbon nanotubes. These light weight but very strong materials have broad applications in transportation, armor, and energy. Associated with the NHMFL is the **Applied Superconductivity Center (ASC)**. Researchers at the ASC study high temperature superconducting materials which can be used in magnet construction, motors, and energy storage or transmission devices. Other materials efforts of note take place in the departments of Chemistry and Biochemistry, Physics, and Scientific Computing, as well as in units of the College of Engineering.

The **Center for Advanced Power Systems** is a multidisciplinary research center organized to perform basic and applied research to advance the field of power systems technology. The research focuses on electric power systems modeling and simulation, power electronics and machines, control systems, thermal management, high temperature superconductor characterization, and electrical insulation research. Development of cutting-edge technologies and a technology-savvy workforce in a broad range of aerospace and propulsion disciplines is the focus of the **Florida Center for Advanced Aero-Propulsion (FCAAP)**. FCAAP is a Center of Excellence led by Florida State University with the University of Central Florida, the University of Florida, and Embry-Riddle Aeronautical University as partners. FCAAP is housed in the newly constructed **Aero-Propulsion, Mechatronics and Energy (AME) Building**. The AME building contains a variety of unique instruments and facilities including wind tunnels and specialized device fabrication space.

The **Program in Nuclear Research** is highly ranked nationally, with emphasis on nuclear structure physics, nuclear astrophysics, radioactive beam studies, studies of nuclear reaction mechanisms using polarized Li beams, accelerator-based atomic physics, electron scattering, hadronic nuclear physics, and relativistic heavy ion reactions. A large part of the program in experimental nuclear physics uses Florida State University's Superconducting Linear Accelerator Facility, which ran its first experiment in 1987. The facility consists of a Super-FN tandem Van de Graaff electrostatic accelerator that injects into a heavy-ion superconducting linear accelerator. The facility utilizes state of the art instrumentation, provides forefront nuclear research capability, and is unique in the southeast.

Florida State University's Coastal and Marine Laboratory (FSUCML) is located forty-five miles south of Tallahassee on Apalachee Bay. This research facility gives scientists from all over the nation immediate access to the pollution-free marine environment of the north Florida coast. Facilities include a fleet of research vessels, classrooms, saltwater-equipped laboratories, guest housing, and a dive locker. FSUCML has recently acquired a new 65' aluminum research vessel, the *RV Apalachee*. A scientific diving program provides support for and oversight of all scientific and educational compressed-gas diving conducted under the auspices of Florida State University. The Academic Diving Program also teaches or co-teaches workshops in scientific diving methods.

The **Center for Ocean-Atmospheric Prediction Studies (COAPS)** trains oceanographers, meteorologists, and scientists in related disciplines. Research at COAPS focuses on ocean and atmospheric dynamics and their applications to interdisciplinary studies. In particular, COAPS scientists specialize in the modeling of ocean and atmospheric dynamics, climate prediction on scales of months to decades, air-sea interaction and modeling, and predictions of socio-economic consequences of ocean-atmospheric variations. COAPS hosts the University's component of the **Florida Climate Institute**, a joint venture with the University of Florida.

Structural Biology, a collaboration of faculty from the Departments of Biological Science, Chemistry and Biochemistry, Mathematics, Medical Science, and Physics, is the research emphasis of the **Institute of Molecular Biophysics**. Research conducted by Structural Biology faculty focuses on the three-dimensional structure of biologically important macromolecules and the structural correlates of their functional properties. A variety of state-of-the-art research tools are available in the Institute and allied units including X-ray crystallography, cryoelectron microscopy, mass spectrometry, computer-based molecular modeling, electron paramagnetic resonance, fluorescence, laser and NMR spectroscopies. Graduate students working under Structural Biology faculty can enroll in either the molecular biophysics (MOB) PhD program or in the graduate programs of biological science, biochemistry or physics.

All aspects of child behavior and learning are researched in Florida State University's **Child Development Programs**. The programs provide research sites and laboratory settings in which faculty and graduate students may observe and work with young children. The Institute for Justice Research and Development (IJRD) advances science, policy, and practice to improve the well-being of individuals, families, and communities impacted by criminal justice system involvement. IJRD conducts rigorous, real-world intervention research; rapidly disseminates findings to enact data-driven reforms; trains professionals at the intersection of social work and criminal justice; and harnesses technology to maximize impact.

Computing and information technology are widely used at Florida State University for both research and instruction. The University's **Information Technology Services (ITS)** manages a high speed network that connects computers throughout the University to each other and to the world. ITS also provides wireless connectivity to the network from most locations on the FSU

campus. In addition to the global Internet, Florida State University participates in the Florida LambdaRail and the National LambdaRail project, a special high capacity state and national network for academic and research purposes. The University maintains a shared high performance computing system, the **Research Computing Center**. The current setup has 748 compute nodes and 14,092 CPU cores. The theoretical peak performance of the complete system is 393 TeraFlops. The RCC has recently added 1.5 PetaByte low-cost archival storage capabilities to the facility.

A number of Florida State University programs have won national or international distinction for their research. These include the following:

The **Learning Systems Institute (LSI)** is a diverse, multidisciplinary program designed to bridge the gap between research and practice in education and training. Researchers at LSI combine strengths in educational leadership, instructional design, human performance, and grants management to design, build, and implement effective learning strategies for a wide range of clients around the world. Founded in the 1960s to help the South Korean government in its efforts to overhaul the country's school system through technology, LSI has grown to become an international resource for learning. In the 1990s, the institute's pioneering work in distance learning led to it becoming the home for the University's online educational outreach, based in the institute's Academic and Professional Program Services.

The **Florida Center for Reading Research** was established by Gov. Jeb Bush in 2002 as the central source of research and training for Florida's initiatives in improving the reading and literacy levels of K–12 students throughout the state. The center focuses campus-based research strengths in psychology and education on science-based approaches to reading instruction and assessment that is disseminated through the Florida Department of Education.

Florida State University's **Autism Institute**, housed in the College of Medicine, coordinates and promotes research, education, and service related to the autism spectrum disorders. The institute promotes Interdisciplinary research that advances scientific knowledge and bridges the gap between this knowledge and clinical/educational practice. The **Center for Innovative Collaboration in Medicine and Law** is a joint effort of the College of Medicine and the College of Law. The center explores educational, research, and advocacy avenues for collaboration and cooperation between the medical and legal professions on behalf of the well-being of consumers. The College of Medicine's **Translational Science Laboratory** houses a broad array of biomedical instruments including mass spectrometers, a high through-put DNA sequencer and biophysical macromolecular characterization devices. Also housed in the College is the FSU Magnetic Resonance Imaging Facility. This newly established facility contain a state-of-the-art Siemens Prisma MRI system which is being used primarily for brain imaging research. A Clinical Research Network is in place which leverages regional campuses, rural training sites and a clinical training site with external research partners. The Office for Clinical Research Advancement (OCRA) is a central coordinating and support office for interdisciplinary biomedical and behavioral researchers across campus that engages, connects, and supports FSU research faculty, clinicians, and FSU communities in advancing medical discoveries to improve health outcomes.

The **John and Mable Ringling Museum of Art** located in Sarasota, Florida, is the designated State Museum of Florida. In 2000, the Legislature shifted administration of the museum to Florida State University in recognition, in part, of the growing trend to maximize the educational value and potential of museums and, in part, to take advantage of the University's commitment to the arts. That potential is especially evident through this association with the Sarasota community due to mutual strengths in the areas of the fine and performing arts and corollary interests, such as the American circus. The Ringling Museum, the home of an internationally renowned art collection, occupies sixty acres of beautiful bay front property including the museum of art, the historic Asolo Theatre (restored in 2006), Ca'd'Zan, the Ringling Mansion, and the Circus Museum, now featuring the Tibbals Learning Center, dedicated to preserving the world's largest and most complete collection of circus art and history. Together with the Florida State University Performing Arts Center, which lies adjacent to the art museum, it holds center stage for Florida State University's Ringling Center for the Cultural Arts, which was created by the Florida Legislature in the year 2000.

Florida State University's **Institute of Science and Public Affairs** is a multifaceted institute of public service and applied research that helps government and private agencies solve problems ranging from hazardous waste disposal to conflict resolution. Research centers within the institute are designed to respond to public and private sector needs. Specialists in the fields of biology, chemistry, geography, education, planning, public administration, physics, economics, law, and other areas carry out the University's public service responsibility through programs in education, training, and applied research. The overriding objective is to successfully apply resources, human and technical, to policy problems within the state of Florida. The Institute provides University students the opportunity to work on specific projects in institute

centers under the supervision of experienced faculty and staff. These projects provide training for students in problem-solving environments. Government agencies and private sector organizations benefit from this dynamic source of trained and skilled personnel.

Since 1951, students and faculty of Florida State University have benefited from its membership in **Oak Ridge Associated Universities (ORAU)**. ORAU is a consortium of more than one hundred PhD granting universities and a management and operating contractor for the U.S. Department of Energy (DOE), located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members. Through the Oak Ridge Institute for Science and Education, the DOE facility that ORAU manages, undergraduates, graduates, postgraduates, and faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines, including business, earth sciences, epidemiology, engineering, physics, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines.

In addition to membership in ORAU, Florida State University is one of the eight core university partners with **Oak Ridge National Laboratory (ORNL)**. The other partner universities include Duke University, Georgia Tech, North Carolina State University, University of Tennessee, University of Virginia, Vanderbilt University, and Virginia Tech. Partnership with ORNL facilitates research collaborations and affords access for faculty, postdoctoral fellows and graduate students to unique capabilities in neutron scattering, high performance computing, and materials science. Furthermore, graduate students have the potential to participate in ORNL's Graduate Opportunities (GO!) Program involving dual mentorship between FSU faculty and national lab staff members.

STUDENT VETERAN INFORMATION

IMPORTANT NOTE: All policies outlined in this General Bulletin apply to every university student who matriculates during the fall, spring, or summer semester of the academic year covered herein, including student veterans. The policies outlined below, however, are specific to student veterans. Please familiarize yourself with this Bulletin in its entirety, and refer to the “Student Services,” “Academic Regulations,” and “Financial Information” chapters for a complete reading of policies and procedures pertaining to those areas. You are responsible for understanding not only the student veteran portions of this Bulletin, but all of the policies and procedures that might pertain to you outside of your student veteran designation.

Student Veterans Center

The Florida State University **Student Veterans Center (SVC)** provides programs and services designed to enhance the retention, graduation, and career-placement rates of student veterans, active-military students, and their dependents. SVC services include assistance with and certification of educational benefits provided through the departments of Veterans Affairs and Defense. In addition, the SVC conducts the orientation breakout sessions for these students and offers a one hour/week course each Fall and Spring semester called Strategies for Veteran Success (SLS 3407). The SVC also coordinates the dozens of Veteran Liaisons (<https://veterans.fsu.edu/about-us/veteran-liaisons>) who are available for advice and assistance in academic and administrative units throughout campus. For more information, please visit *A4300 University Center*, call (850) 644-9562, fax (850) 645-9868, e-mail veteran@fsu.edu, or visit <https://veterans.fsu.edu/>.

Priority Registration

Priority course registration for an upcoming semester is available to active-military students, student veterans, and military/veteran dependents who have made prior contact with the Student Veterans Center by self-identifying (as one of these types of students) or by submitting an FSU Request for Benefits form. However, priority registration is not available to these students if they are registering for classes for the first time (as either freshmen, transfer students or graduate students). In other words, the priority registration policy takes effect when the course-registration window opens for these students' second semester of classes. Any student who chooses to use VA education benefits must submit to the Student Veterans Center the required form(s) and supporting documentation.

Note that Section 303 of Public Law 115-48 requires the federal Department of Veterans Affairs to publicly report if a school offers priority course registration (or enrollment) to veteran/military students. In addition, Florida law 1004.075 requires public universities to offer priority course registration to veteran/military/dependent students who are using G.I. Bill ® benefits, until these benefits expire. Florida State University exceeds this state law by offering priority course registration, until the time they graduate, to all veteran/military students – including those not using G.I. Bill ® benefits – and veteran/military dependents (if dependents have used G.I. Bill ® benefits during part of their time at FSU).

Military Short-Term Absence or Call to Active Duty

The University recognizes and appreciates the important contributions made in service of our country by active duty, Reserve, and National Guard members and their dependents. In order to accommodate the students and their dependents, University faculty and staff will provide them with the following options to accommodate unexpected training/drill, deployment, or change-of-station orders:

For any training/drill, deployment, or change-of-station orders: Students must attempt to make arrangements with their instructors to maintain and/or make up classwork as needed. Registration for those courses in which instructors accommodate the absence will remain unchanged and tuition and mandatory fees will be assessed in full for those courses. Service members should provide instructors with maximum advance notice of absences, providing copies of training/drill, deployment, and/or change-of-station directives from the Military, Reserve, or National Guard.

Instructors will work with students wherever possible to assign grades as appropriate (including incompletes to be made up later). Instructors must accommodate absences of up to two weeks in duration (or equivalent in Summer) in accordance with paragraph one.

When unable to make satisfactory arrangements with all instructors: Courses will be dropped and the tuition and mandatory fees for those courses will be rescinded.

When unable to make arrangements with any instructors for unexpected orders requiring longer than a two-week absence: The student's entire registration will be withdrawn or cancelled and 100% of the tuition and mandatory fees will be rescinded.

Tuition Waivers – Military Veterans, Service Members, and their Dependents

An out-of-state tuition waiver is offered to FSU students physically residing in Florida who are current or former members of the U.S. Armed Services – including honorably discharged veterans, and members of the Reserve or National Guard – as well as eligible veteran/military dependents who are using federal Veterans Affairs educational benefits. The out-of-state tuition waiver is also extended to active duty members of the U.S. armed services who are stationed or reside outside the state of Florida.

In accordance with Public Law 115-251, students using VA educational benefit Chapters 30, 31 or 33 must also submit a written request for an out-of-state tuition waiver to the FSU Student Veterans Center. In addition, these students must provide the SVC with their Certificate of Eligibility prior to the tuition-payment deadline each semester.

Contact the FSU Student Veterans Center for additional information on out-of-state tuition waivers and their requirements.

Military Credit

Current and former members of the U.S. Armed Services may receive college credit based upon military experience, training, and coursework. Academic credit acquired while in the military will only be awarded if it is recognized by the American Council on Education (ACE) in its *Guide to the Evaluation of Education Experiences in the Armed Services*. Note that ACE recommendations for vocational or technical credit are not accepted as transfer credit.

Credits earned will be evaluated after the application review process has been completed and admission to the university has been granted. The Audit and Evaluation Section of the Office of the University Registrar will post all credit earned for military experience, training, and coursework, as recommended in the ACE *Guide*, to the student's permanent record.

Note that academic credit earned through the Community College of the Air Force is evaluated through the standard transcript-review process.

Deferments and Financial Arrangements

Students using VA education benefits are entitled to an additional stipend each month from the federal government. However, the first of these stipend checks are sometimes delayed, so these students should be prepared to meet all of their expenses for the first two months.

Any time there is a delay in the receipt of VA educational benefits, students using these benefits to cover tuition and health fees can defer (postpone) their payment (in accordance with Florida law 1009.27(2)). This deferment is not automatic, however, and must be explicitly requested by eligible students through the Student Veterans Center, by the fifth day of the semester. Students receiving deferments who have other types of financial aid pending will have their tuition paid by that financial aid and their veterans deferment nullified.

With certain exceptions (see the next paragraph), students who receive a veteran deferment but whose tuition is still not paid by the deferment expiration date will be assessed a \$100.00 late payment fee and may have their course schedule cancelled. Moreover, such students will not be eligible to receive a veteran deferment in the future. (Note also that course registration, transcripts, and diplomas will not be processed until all university debts are paid in full.)

In accordance with Public Law 115-407, students using VA educational benefit Chapters 31 and 33 are protected from portions of the above policy, but only after these students provide additional documents to the FSU Student Veterans Center. The protection starts when a Chapter 31/33 student submits their Request for Benefits form, or their Certificate of Eligibility, or a Statement of Benefits, or their Chapter 31 authorization. The protection ends when the VA makes payment or 90 days after the date FSU certifies the tuition and fees.

Return of Military Tuition Assistance Funds Due to Withdrawal

Florida State University will return any unearned tuition assistance (TA) funds on a prorated basis through at least the 60% portion of the period for which the funds were provided. TA funds are earned proportionally during an enrollment period, with unearned funds returned based upon when a student stops attending. These funds are returned to the military service branch. Questions concerning return of funds can be directed to CTL-TPC@fsu.edu.

U.S. Department of Veterans Affairs Approved Facilities

Branch Campus Locations

Sub Facility Code	Name	Address	Site Type
11816010	Florida State University	600 W College Avenue, Tallahassee, FL 32306 United States 222 South Copeland Street	Main Campus
11816210	Florida State University Panama City	4750 Collegiate Drive, Panama City, FL 32405 United States	Branch Campus
11816110	Florida State University Republic of Panama	FSU-Panama Edificio 227, Ciudad del Saber, Panama, Republic of Panama	Branch Campus

Off-Campus Instructional Locations

Sub Facility Code	Description	Address	City	Zip Code
11X18710	Extensions Located in 32301 zip code			
	Jim Moran Building	111 S Monroe St.	Tallahassee	32301
	Law School Advocacy Center	301 S M L King Jr Blvd.	Tallahassee	32301
	Warren Bldg.	201 W Bloxham St.	Tallahassee	32301
11X18310	Extensions Located in 32304 zip code			
	Dunlap Success Center	100 S Woodward Ave.	Tallahassee	32304
	Honors Scholars & Fellows	127 Honors Way	Tallahassee	32304
	Deviney Hall	111 S Woodward Ave.	Tallahassee	32304
	Carnaghi Arts Building	2214 Belle Vue Way	Tallahassee	32304
11X18910	Extensions Located in 32310 zip code			
	Middleton Golf Center	2550 Pottsdamer St.	Tallahassee	32310
	FAMU-FSU Engineering Bldg. B	2525 Pottsdamer St.	Tallahassee	32310
	FAMU-FSU Engineering Bldg. A	2525 Pottsdamer St.	Tallahassee	32310
	I.P. - Johnson (Robert M.)	2035 East Paul Dirac Dr.	Tallahassee	32310
	Materials Research Building	2005 Levy Ave.	Tallahassee	32310
	Multi-Purpose Education Facil.	2566 Pottsdamer St.	Tallahassee	32310
11X18510	Extension Located in 34142 zip code			
	Collier (Immokalee) Clinic	1441 Heritage Blvd.	Immokalee	34142
11X18410	Extension Located in 34143 zip code			
	Center for the Performing Arts	5555 N Tamiami Trail	Sarasota	34243
11X19210	Extension Located in 32772 zip code			
	Saint Petersburg College- University Partnership Center	FSU Suite 122, 9200 113th Street North	Seminole	32772
11x18810	Mckennon Hall/Daytona Beach CC	1200 W International Speedway Blvd.	Daytona Beach	32120

11x18610	Ft. Pierce Regional Medical Facility	2498 S 35th St.	Ft. Pierce	34981
11x19010	Orlando Regional Medical Facility	250 E Colonial Dr., Suite 100	Orlando	32801
11x19110	Pensacola Regional Medical Facility	1000 University Parkway	Pensacola	32504
11x19310	Sarasota Regional Medical Facility	201 Coconut Ave.	Sarasota	34236
11x19410	Tallahassee Regional Medical Facility	3331 Capital Oaks Dr.	Tallahassee	32308

Overseas Locations

Region	Address	City	County	Country Code
International	The Alpine Lodge, Route De Belvédère, 1854 Leysin, Switzerland	Leysin	Switzerland	SZ
International	Calle La Chimba - Rio Oro, San José, Santa Ana, 10904,	San Jose	Costa Rica	CR
International	Ul. Myasnitskaya, 20 Moscow, 101000 Russian Federation	Moscow	Russia	RU
Italy	15 Borgo Degli Albrizi, 50122	Firenze	Italy	IT
Spain	2 Caller Blanqueras	Valencia	Spain	ES
United Kingdom	99 Great Russell Street, Greater London	London	England	GB

INTERNATIONAL EDUCATION

International Commitment

Florida State University recognizes that a great university builds and extends its service, its potential for research, and its scholarly standing, and enhances its contribution to the education of students and citizens of the state by providing an international dimension to its educational programs. This is true in the professions, the sciences, the arts, and the humanities.

The University recognizes that in an interdependent world, the welfare of the state and the well-being of its citizens are linked to the welfare of all peoples. Thus, it is vital that the teaching, research, and service of Florida State University support the economic and social development of the state, the nation, and other countries; protect the world environment; lead individuals and groups to better understanding of themselves and others; and contribute toward international understanding, world peace, and community self-awareness.

The University, in serving the community, recognizes that its major responsibility is to educate students in a manner that provides them with the understanding, skills, and knowledge that will allow them to be creative and useful citizens not only of the state, but of the world. In this process of education, students from other countries who study at our campus and Florida State University students who have studied overseas play an important role.

To accomplish these goals, Florida State University encourages and seeks students from abroad for its undergraduate and graduate programs and professional colleges and schools in such numbers and with such geographic origins, as to have an impact on the achievement of the University's educational goals. It also seeks to provide opportunities for study abroad for its students and to afford them guidance and assistance in integrating these experiences with regular university study. Finally, the University encourages the development of an international dimension in the teaching, research, and service through the exchange of persons, ideas, and materials with other countries.

Florida State University seeks to accomplish these objectives through evaluation of existing and proposed international programs and services and by both short- and long-range planning for continued improvement and innovation to further the goals of international education in the University. Consistent with these goals, the University resolves to make available its facilities and resources to offer diversified international educational programs of quality and usefulness for all its students. The financial support needed for the accomplishment of these goals will be provided by University resources and is actively sought from state, federal, and foreign governments, as well as from international organizations, foundations, private organizations, and individual donors.

Center for Global Engagement

Director: Cynthia Green; **Associate Director:** Kristen Hagen

The mission of the **Center for Global Engagement (CGE)**, under the Division of Student Affairs, is to facilitate international diversity and foster global understanding and awareness within the FSU community. The CGE is committed to enhancing FSU's internationalization initiatives by offering academic classes and several certificate programs designed to help develop a more intercultural and competent campus community. The Global Partner Certificate Program provides training and workshops to increase intercultural competence for faculty and staff. The Global Citizenship Certificate Program helps prepare undergraduate students for today's global society through a combination of curricular and co-curricular programs. The CGE also offers many enriching co-curricular opportunities for all FSU students to explore other cultures and current global issues through intercultural programs, the Engage Your World Intercultural Dialogue Series, International Coffee Hour, and Global Café. The CGE works to increase international student enrollment by supporting programs bringing in funded international students through foreign government or third-party sponsors and developing special programs through agreements with partner institutions abroad to attract talented students to the University to complete their senior year and apply to graduate school. The CGE facilitates both academic and short-term cultural exchange programs with over 45 international partner universities. The CGE also provides immigration services and ongoing support to international students and visiting scholars to ensure immigration compliance and to assist with their integration into the campus community.

The Center for Global Engagement is located in the Global and Multicultural Engagement building (The Globe) at 110 S. Woodward Avenue, Tallahassee, FL 32306-4216. For more information, visit <http://cge.fsu.edu/>, call (850) 644-1702, or e-mail cge@fsu.edu.

The Frederick L. Jenks Center for Intensive English Studies

Program Director: Patrick Kennell

The **Frederick L. Jenks Center for Intensive English Studies (CIES)** provides intensive instruction in the English language to non-English speakers. Its primary target audience is international scholars who are preparing to pursue degree work in American colleges and universities.

In addition, CIES evaluates the English speaking proficiency of FSU's international Teaching Assistants (TAs) through its administration and scoring of the SPEAK test. Along with this assessment, the Center provides credit-bearing classes for those prospective international TAs who need further development of their speaking proficiency in English.

The center also provides English-as-a-second-language services for the spouses of regular students at Florida State University, as well as for some already admitted international students who are experiencing difficulty in mastering the English language. CIES has an average of fifty to sixty students per session, representing approximately twenty different countries. Through its well-developed Conversation Partner program, CIES also serves as an integral part of FSU's Global Pathways Certificate in providing many valuable and interesting opportunities for FSU students to meet, interact, and develop friendships with students from around the world. CIES truly is the place at Florida State "where the world comes to learn English". For further information, please call us at (850) 644-4797 or visit our Web site at <http://cies.fsu.edu>.

International Programs

Director: James E. Pitts; **Associate Director:** Louisa Blenman

Florida State University offers a wide variety of opportunities for students to study overseas. Students learn not only from their exposure to the cultural resources of the host countries but also through firsthand observations and participation in the political, economic, and social changes taking place outside the United States.

The University has operated international study centers in Panama City, Republic of Panama since 1957; in Florence, Italy since 1966; in London, England since 1971; and in Spain since 1997 (originating in Torremolinos and moving to its permanent home in Valencia in 2000). At each of these locations, courses are offered during the Fall, Spring, and Summer semesters. In addition to FSU students, the centers are open to students from other U.S. institutions and throughout the world.

Each of these study centers offers a broad curriculum, which includes courses that ideally lend themselves to their international location. In Florence, the courses focus on the areas of art history, classics, writing, English literature, history, humanities, Italian language, and politics. The London center offers courses in the areas of art history, education, English literature and writing, history, mathematics, music, politics, science, social sciences, and theatre. In addition, the London Study Center serves as a base of operations for a number of curriculum-focused programs. Students may pursue specific topics such as British history, English literature, communications, international affairs, choral and instrumental music education, global sport management, multi-media, theatre, textiles, and merchandising. In Valencia, courses are offered in Spanish language, literature, and civilization as well as art, business, English literature, humanities, music, mathematics, and science. In the Republic of Panama, the FSU-Panama campus offers courses in a variety of liberal arts disciplines including mathematics and the sciences. FSU-Panama also functions as a two- or four-year degree institution serving a large population of native Panamanians. Each study center offers an extensive internship program within a variety of disciplines.

In addition to the four Study Centers, International Programs offers programs in many other locations with sites varying from year to year. Programs are currently planned in locations including Australia, China, Costa Rica, Croatia, Czech Republic, France, Germany, Grenada, Indonesia, Russia, Switzerland, Thailand, and the United Kingdom. These locations host a variety of study abroad faculty-led opportunities which are either broad curriculum offerings or programs focusing on a particular area or major. Internship opportunities are available in Australia and China, as well as at the four study centers. Additionally, the First Year Abroad program, created especially for high-achieving, global-thinking students, allows students to complete the first twelve months of their Florida State career studying abroad with International Programs. Students can choose to spend their first year at any of the four study

center locations. These students may be able to change their location for the Summer term and spend it at any other study center, though visa restrictions apply for some locations. International Programs is constantly adding to and updating the program offerings and locations. For the latest information, visit the Web site at <https://www.international.fsu.edu> or contact us at: *International Programs, A5500 University Center Tallahassee, FL 32306-2420; (850) 644-3272 or (800) 374-8581; IP-info@fsu.edu.*

Florida-Costa Rica Institute

Co-Director: Stephanie F. Tillman

The Florida-Costa Rica Linkage Institute, known as FLORICA, was created in 1986, authorized by the Florida Legislature in 1987, and formalized by an agreement signed by the State University System of Florida, the Florida Community College System and the Council of Rectors of Costa Rican Universities (CONARE). Since its beginning, FLORICA has been administered for Costa Rica by CONARE and on behalf of the State of Florida by The Florida State University and Valencia College, with co-directors appointed from each institution.

FLORICA has strong credibility both in Florida and Costa Rica as a stimulus and a catalyst. The Institute has interfaced broadly in Costa Rica with public and private institutions and agencies including all of the public universities.

Costa Rican citizens who have applied and have been accepted into a Florida public university or community college may apply for out-of-state tuition waivers through the Florida-Costa Rica Institute Non-Resident Tuition Exemption Program.

For more information, visit <https://international.fsu.edu/Documents/MoneyMatters/Scholarship-FloricaApplication.pdf> or call (850) 644-3272.

Law Program at The University of Oxford

Florida State University conducts an international law program in the prestigious academic atmosphere of the University of Oxford. The program utilizes its unique setting to enhance the study of international and comparative law and the history of common law. ABA-approved law courses are taught by a combination of Florida State University College of Law faculty and approved professors from the University of Oxford. The program is available to students in good standing at an ABA-approved law school who have completed at least one year of study. Visit our Web site at <https://www.law.fsu.edu/academics/academic-programs/study-abroad/oxford>.

STUDENT SERVICES

Florida State University students engage in a supportive and challenging environment designed to maximize learning and success. The University provides opportunities for student growth in the areas of social and cultural awareness, physical well-being, intellectual expansion, and spiritual and moral growth. The University is committed to creating a sense of community among students, faculty, and administrators that embodies respect, responsibility, and acceptance of all people.

Division of Student Affairs

Vice President for Student Affairs: Dr. Amy Hecht

Associate Vice President for Student Affairs: Dr. Allison Crume

Associate Vice President for Student Affairs: Angela Lauer Chong, J.D.

Assistant Vice President for Student Affairs: Dr. Brandon Bowden

Director of Administration: Dr. Dorsey Spencer Jr.

The goals of the Division of Student Affairs are to facilitate student development, celebrate differences, and promote civic and global responsibility in both formal and informal educational experiences. The Vice President for Student Affairs and staff are responsible for the following departments:

Campus Recreation

Dr. Bobby E. Leach Student Recreation Center

Fitness & Movement Clinic

FSU Challenge

FSU Reservation Lakefront Park

Intramural Sports

Outdoor Pursuits

Sports Clubs

The Career Center

The Center for Academic Retention and Enhancement (CARE)

Summer Bridge Program

Unconquered Scholars Program

Student Support Services (SSS)

Student Support Services-STEM (SSS-STEM)

Bridge to Graduate School

Transition, Engagement, & Academic Mentoring (TEAM)

College Success Program

Pre-Collegiate Programs

The Center for Global Engagement

The Center for Leadership & Social Change

Counseling and Psychological Services

Department of Student Support and Transitions

Case Management Services

New Student and Family Programs

Office of Accessibility Services

Office of Investigation and Assessment

Victim Advocate Program

Withdrawal Services

Oglesby Union

Art Center

Askew Student Life Center

Crenshaw Lanes

Fraternity and Sorority Life

FSU Flying High Circus

Guest Services

Oglesby Gallery

Union Board

Union Productions

Student Conduct and Community Standards

Student Engagement

Student Governance and Advocacy

Student Life Cinema

Student Organizations and Involvement

University Health Services

Center for Health Advocacy and Wellness

University Housing

FSU Childcare and Early Learning Programs

Some of these departments and their programs are highlighted below; however, for more complete information, refer to Florida State University Student Handbook or the Division of Student Affairs Web site at <http://www.studentaffairs.fsu.edu/>. The Handbook is available at the Union Information Center.

The University also offers the following student service programs, which are administered by their individual offices or departments:

Assessment Services

FSU Police Department

Radio and Television

Seminole Dining

Student Veterans Center

Transportation and Parking Services

Bicycles on Campus

For academic support services, refer to the “Academic Advising and Academic Support Services” chapter of this *General Bulletin*. For employment services, refer to the “Financial Information” chapter.

Campus Recreation

“Find what moves you” with Campus Recreation. The department supports every member of the FSU community in their pursuit of lifelong wellness by providing a diverse array of high-quality recreational programs, services, and facilities.

Two fitness facilities, the Dr. **Bobby E. Leach Student Recreation Center** and the **Fitness and Movement Clinic**, offer a variety of fitness and wellness services to students, faculty, and staff. Both facilities feature cardiovascular and strength training equipment along with free weights available to all patrons. Nearly one hundred group fitness classes are available each week along with fitness coaching and personal training services from nationally-certified staff. The Leach Center also contains a sixteen-lane, twenty-five-yard lap pool, spa and sauna, indoor jogging track, basketball and racquetball courts, and smoothie bar. The **FSU Aquatics** staff provides health and safety instruction, including CPR/AED, First Aid, and Lifeguard training, adult and youth swim lessons, and other certification programs. Access to both fitness facilities is free for students. Faculty, staff, alumni, and affiliates may purchase monthly or annual memberships.

The **FSU Reservation** (the “Rez”) is the University’s seventy-three acre lakefront facility located just five minutes from campus. Students gain free entry into the Rez, where they can enjoy kayaking, canoeing, sailing, or stand-up paddle boarding on Lake Bradford. Sunning, swimming, sand volleyball, disc golf, a climbing wall, and picnic pavilions are also available. Student organizations, University programs, and other community groups can rent space in the FSU Reservation Retreat Center for meetings. The Rez is also home to Campus Recreation’s high and low challenge (ropes) courses, which host teambuilding and leadership development events by the FSU **Challenge Program**. The **Outdoor Pursuits** program at the Rez provides students the opportunity to enjoy outdoor adventure trips around the region including backpacking, kayaking, climbing, mountain biking, and paddling.

Campus Recreation also operates the **Intramural Sports and Sport Club** programs. Students may participate in over forty intramural sport leagues year-round, from flag football to soccer and basketball to kickball. Leagues are available for men’s, women’s and co-ed teams with various divisions to accommodate a wide range of skill and talent levels. Most IM sports are free for students. Over 2,000 students participate in one of nearly forty sport clubs. The clubs provide various instructional, recreational, and competitive opportunities for the more dedicated athlete. Sport clubs are over ninety percent self-funded, meaning that students fundraise tens of thousands of dollars annually to purchase new equipment, uniforms, and to fund travel. Students can also enjoy pick-up games virtually any time at FSU’s outdoor sports facilities including the award-winning Rec SportsPlex, the Main Campus Fields, and Westside Courts.

For more information on Campus Recreation offerings, visit <http://campusrec.fsu.edu>.

Career Center

Nationally recognized for its comprehensive career services, the Florida State University Career Center provides students and alumni with the services and resources they need for career success. With individualized career advising, a library offering thousands of information resources, employability skills workshops, mock interviews, and more, The Career Center helps students and alumni design their careers.

Career advisors, liaisons, and staff assist students with choosing a major, researching occupations and potential employers, identifying internship opportunities, exploring post-graduate study, and developing job search strategies. No appointment is necessary to speak with a career advisor or liaison. For students who would like to design their career plans with the assistance of an instructor, The Career Center offers a one to three-credit hour course, SDS 3340 Introduction to Career Development. The course gives students indispensable resources to help make a successful transition to their future career opportunities.

The Career Center connects students directly with employers through career fairs, on-campus interviewing, job shadowing, a mentorship program, and a powerful network of Florida State alumni and friends of the University. These programs and services allow students to network with employers and apply for full-time, part-time, and internship positions as well as for other career-related work experience such as cooperative education, externships, or volunteer opportunities through NoleNetwork, an extensive online jobs database. Through online micro-credentialing programs like ProfessioNole Ready and ProfessioNole Pathways, The Career Center is able to help students develop and strengthen career-readiness competencies through co-curricular engagement to make themselves more appealing to potential employers.

FSU students can stand out from the competition by taking advantage of Career Center programs and services like the Career Portfolio and the Garnet & Gold Society. The Career Portfolio allows students in all academic disciplines to learn about, build, and manage their skills and accomplishments through an online portal. Additionally, students can make themselves more marketable to employers or graduate programs by participating in the Garnet and Gold Scholar Society, a unique program that facilitates involvement and recognizes engaged, well-rounded students who excel within and beyond the classroom. The Career Center also offers customized mock interviews, where students can practice and improve their interviewing skills, as well as workshops where Career Center staff present on employability and career development skills, including job searching, writing résumés and cover letters, interviewing, going to graduate school, and more.

For the sixth year in a row, students reported that the number one way they found employment was through The Career Center. Each year, The Career Center engages with more than 30,000 students, helping them discover their unique interests and preparing them for career success.

The Career Center is located in the Dunlap Student Success Center at the corner of Woodward Avenue and Traditions Way and is open from 8:00 a.m. to 5:00 p.m. (EST), Monday through Friday. Drop-in career advising is available Monday through Friday from 9:00 a.m. to 4:30 p.m. and on select Tuesday evenings until 8:00 p.m. during the Fall and Spring semesters. On Fridays, career advising is not available from 1:30 to 2:30 p.m. For more information about The Career Center's events and services, call (850) 644-6431 or visit <http://www.career.fsu.edu>.

Center for Academic Retention and Enhancement (CARE)

Florida State University and the **Center for Academic Retention and Enhancement (CARE)** are committed to recruiting, retaining, and graduating students traditionally underrepresented in higher education, with particular focus on first-generation and economically disadvantaged students at FSU. CARE is a multifaceted department that provides preparation, orientation, and academic support programming for students who face unique challenges in college because of economic and educational circumstances. CARE is designed to help students who are traditionally underrepresented in higher education enroll, persist, and graduate from college by connecting them to the resources, tools, and network of support that will aid in their academic and personal development.

CARE offers participants a variety of programs and services to support their academic, personal, and professional development such as exclusive, full-credit Liberal Studies courses, academic advising, college life coaching, financial aid and literacy advising, academic tutoring, a computer lab, learning skills workshops, graduate school preparation, and cultural enrichment activities. The Center promotes a caring environment for students to discuss their academic, personal, and/or social concerns with a friendly, supportive staff.

For more information on CARE's programs and services, please visit <https://care.fsu.edu>, or contact the Department at CARE@fsu.edu or (850) 644-9699.

The **Summer Bridge Program** is a high school-to-college admissions and transition program to assist students who are the first generation in their family to attend college and are economically disadvantaged. The Summer Bridge Program provides comprehensive orientation and academic support for participants designed to ease the transition from high school to college and to build a strong academic foundation. Students admitted to the University through the CARE Summer Bridge Program begin their studies in the summer and maintain their membership throughout their enrollment at FSU. Interested students should submit an application for admission to the University, CARE supplemental questions, Self-reported Student Academic Record, ACT or SAT test scores, and the Free Application for Federal Student Aid (FAFSA). The minimum requirements for consideration include a 3.0 academic GPA as recalculated by the Office of Admissions and either an ACT composite score of 19 or SAT total score of 990. Meeting the minimum requirements does not guarantee admission to the program.

Unconquered Scholars Program provides an array of support services promoting overall success to youth who experienced foster care, homelessness, relative care, or ward of the State status. Florida State University is committed to meeting the unique needs of Unconquered students, so they experience the long-term professional and personal benefits associated with educational attainment. The Unconquered Scholars Program offers participants advising, financial aid assistance, mental wellness support programming, academic and personal skills workshops, volunteer opportunities, and social programs/activities. For more information on the Unconquered Scholars Program, contact the Program Coordinator at (850) 644-9699.

Student Support Services (SSS) is a federally funded TRIO program offering free academic and personal support services to program participants to help them remain at FSU, graduate on-time, and prepare for post-graduation life. FSU SSS provides academic and engagement activities for qualified students throughout their enrollment at FSU. Students must meet educational and income guidelines to be eligible to participate in SSS.

Student Support Services-STEM (SSS-STEM) works with qualified students majoring a Science, Technology, Engineering, or Math (STEM) field. Participants of SSS-STEM connect to supplemental tutoring, academic workshops, experiential learning opportunities, and post-graduation planning activities. STEM Specialists help participants connect their classroom experiences to real-world application. Students must meet educational and financial qualifications to participate and must major in a STEM program of study. SSS-STEM is fully funded by the U.S. Department of Education.

The CARE Tutoring & Computer Lab provides access to academic support and technology for the FSU campus community. Students can receive one-on-one or group tutoring and supplemental instruction free-of-charge in the CARE Lab. FSU students also can utilize one of the 90 computer workstations for coursework. Staff are prepared to assist students in developing effective study skills, review materials to explore learning styles, develop self confidence in course work and reduce feelings of fear and failure.

Bridge to Graduate School is a program designed to prepare traditionally underrepresented students for applying to and succeeding in graduate school. Students participate in workshops and course activities that will help them understand the admissions processes, as well as learn about methods to help fund their graduate school education. Students must be classified as junior or senior level in order to apply for the program.

Lateral Admissions Programs: CARE provides an opportunity for traditionally underrepresented students to join our network of programs through one of our lateral admissions programs. The Transition, Engagement, & Academic Mentoring (TEAM) Program is a peer-mentoring program for any FSU first-year students. Students accepted into TEAM receive a peer mentor and participate in a variety of academic and engagement activities to help them transition to campus and connect to the FSU campus community. The College Success Program allows students who may be minority, low-income, first-generation, or non-traditional aged college students to apply to connect to CARE resources and support systems.

Pre-Collegiate Programs

College Reach Out Program (CROP) is a state-funded program established to identify, motivate, and prepare disadvantaged middle and high school students to pursue post-secondary education. Through supplemental academic assistance, enrichment activities, educational field trips, and college tours, CROP prepares students for the rigors of a college education.

The **University Experience Program** is the Summer residential component of CROP offering targeted high school students from socioeconomically dis-

advantaged backgrounds the opportunity to visit the Florida State University campus during the Summer. They attend courses and take part in cultural enrichment and college exposure activities.

The **Upward Bound Program (UBP)** is a federally-funded program that serves high school students from low socio-economic backgrounds. Located at Gadsden County High School in Gadsden County, Florida, Upward Bound offers developmental opportunities to students through a variety of educational activities, including an on-site computer lab dedicated to UBP participants. UBP staff also assists students in the development of personal and social skills that will help them complete high school and continue their formal education in a post-secondary setting.

For more information, refer to the “Academic Advising and Academic Support Services” chapter of this *General Bulletin*.

Center for Global Engagement (CGE)

The Mission of the Center for Global Engagement (CGE) is to facilitate international diversity and foster global understanding and awareness within the FSU community. The CGE is committed to enhancing FSU’s internationalization initiatives by offering academic classes and several certificate programs designed to help develop a more intercultural and competent campus community. The Global Citizenship Certificate helps undergraduate students prepare for today’s global society through a combination of curricular and co-curricular programs and the Global Partner Certificate provides training and workshops to increase intercultural competence for faculty and staff. The CGE provides a variety of social and cultural programs such as International Coffee Hour, Global Café, Engage Your World Intercultural Dialogue Series, and other intercultural programs to promote interaction and increase cultural understanding among all FSU students. The CGE works to increase international student enrollment by supporting programs bringing in funded international students through foreign government or third-party sponsors and developing special programs through agreements with partner institutions abroad to attract talented students to the University to complete their senior year and apply to graduate school. The CGE also facilitates both academic and short-term cultural exchange programs with over 45 international partner universities. The CGE also provides immigration services and ongoing support to international students and visiting scholars to ensure immigration compliance and to assist with their integration into the campus community.

The Center for Global Engagement is located in the Global and Multicultural Engagement building (The Globe) at 110 South Woodward Avenue, Tallahassee, FL 32306-4216. For more information, visit <http://cge.fsu.edu/>, call (850) 644-1702, or e-mail cge@fsu.edu.

Center for Leadership & Social Change

With a mission to transform lives through leadership education, identity development, and community engagement, the **Center for Leadership & Social Change** works towards the following vision:

- Students and alumni are responsible citizens and effective leaders. They are aware of and engaged in the world around them and use their talents and means to create a more just and humane society.
- Students are aware of their values and multiple identities, including ability, age, class, ethnicity, faith structure, gender identity expression, nationality, race, sexual orientation, and socioeconomic status. They recognize the intersection of these identities and acknowledge that multiculturalism enhances the quality of life. From this understanding, students belong to and create intercultural communities that benefit from the value of difference.
- Students and alumni are known and respected for their leadership acumen and public service tradition. In their personal, professional, and creative communities, they readily seek and accept opportunities for life-long learning, meaningful influence, and positions of trust.

The Center offers more than 30 student programs related to service, leadership education, and identity development. For more information, contact the Center for Leadership & Social Change in the Dunlap Student Success Center at 100 South Woodward Avenue, Tallahassee, FL 32306; (850) 644-3342; visit <http://www.thecenter.fsu.edu>; e-mail: thecenter@fsu.edu.

Counseling and Psychological Services

Counseling and Psychological Services, a department in the Division of Student Affairs, provides counseling services and programs to help students resolve psychological issues and personal concerns that interfere with academic progress, social development, and emotional well-being. Our goal is to help students function to the best of their abilities and make the most of their years at FSU. Because student fees cover these services, there is no out-of-pocket expense for any visit for all currently enrolled FSU Students. The services are provided by licensed psychologists, licensed mental health coun-

selors, licensed clinical social workers, and trainees on varying levels. These services include but are not limited to brief individual therapy, group therapy, crisis intervention, consultation, online treatment options, and referrals.

Outreach presentations on mental-health topics and life skills are available to students, residence halls, student organizations, faculty, and staff. Those interested can complete the online request form at <http://counseling.fsu.edu>. Counseling and Psychological Services sponsors RENEW (Realizing Everyone’s Need for Emotional Wellness), a peer-educator student organization whose mission is the promotion of emotional health and coping skills to FSU students. Students can receive individual instructional sections by RENEW members on various topics including time management, stress management, and test anxiety.

Enrolled students may initiate counseling services by walking in to Counseling and Psychological Services during regular office hours and requesting to speak with a clinician. When meeting with a clinician at walk-in, the clinician will determine the best plan for meeting the individual student’s mental health needs. In addition, students who are experiencing a mental health crisis at a time outside of Counseling and Psychological Services’ regular office hours have the option of calling the after-hours service at 850-644-TALK (8255) and immediately speaking with a clinician. Records of visits to the UCC as well as after-hours crisis calls are strictly confidential and are not included in the student’s University records. Confidential information will not be released to anyone without written permission, unless there appears to be clear and imminent danger to the student or others.

Students who are aware that they will require longer-term treatment are encouraged to make arrangements for private care in the community before entering the University. However, if necessary, the Counseling and Psychological Services staff will make referrals for ongoing treatment in the Tallahassee community. Treatment outside the center will be at the student’s expense.

Counseling and Psychological Services is located on the second floor of the Askew Student Life Center, Suite 250 with office hours between 8:00 a.m. and 4:00 p.m. on weekdays (Monday through Friday). For more information about Counseling and Psychological Services, call (850) 644-TALK (8255) or visit our Web site at <http://counseling.fsu.edu>. Counseling and Psychological Services is accredited by the International Association of Counseling Services, Inc.

Department of Student Support and Transitions

The Department of Student Support and Transitions (DSST) supports an inclusive academic environment through education, empowerment, crisis management, and advocacy of students in collaboration with campus and community partners. The DSST supports student success. This includes advocacy for students reporting concerns, victimization, and students in crisis. For more information, contact DSST at 4100 UCA, call (850) 644-2428 or (850) 644-8504 (TDD), or visit <http://dsst.fsu.edu>.

Case Management Services works with students to provide emotional support, brief crisis counseling, and advocacy, identifying immediate needs and making appropriate referrals to campus/community resources. Cases are monitored, as needed, to ensure individuals receive the support necessary to improve their life situation. Case Managers may also assist in sending crisis notification letters to faculty. Case management is available to assist with questions, and to take referrals from any faculty, staff, family, friend, or community member concerned about an individual’s well-being. For more information, please call (850) 644-2428 or visit dsst.fsu.edu/cms/.

New Student & Family Programs facilitates a welcoming and inclusive transition to Florida State University for all new students and their families. Orientation is the first program that helps ease the transition to Florida State University and college life. During Orientation, students learn about FSU offerings and resources, meet with an academic advisor, register for classes, and engage with their peers and upperclassmen students. Family members can attend a concurrent Orientation session, which provides insight and resources to help support their student throughout the college experience. To register for Orientation, students must be admitted and must have activated their <http://my.fsu.edu> account. Students will receive an email outlining next steps, including completing the Online Pre-Orientation module and then registering for Orientation. Additional information can be found in their To-Do List within their <http://my.fsu.edu> account.

Incoming students have a variety of resources available to them through New Student & Family Programs. The New ‘Nole Web site, <http://dos.fsu.edu/newnole/>, was designed to be a one stop shop for incoming students, guiding them on what is next after they are admitted to FSU. The Web site features checklists, as well as information on how to submit immunization forms, how to find your academic advisor, and how to pay tuition. New Student & Family Programs also offers *Seminoles in the City*, a guide to off-campus living, and the First Year ‘Nole e-Newsletter that goes out three times a semester to keep students informed on campus happenings, involvement opportunities, and

success strategies. New Student & Family Programs also hosts Ask a ‘Nole, which helps students find their classes on the first day of school and get answers to general questions about FSU.

New Student & Family Programs also offers Family Connection, an organization of family members who are committed to supporting student success through communication, partnerships, and programs. Family Connection is free of charge and only requires activation of membership by registering at Orientation or visiting <http://dos.fsu.edu/family/>. Through Family Connection, family members receive resources like the Family Connection e-Newsletter and the Family Calendar. Family Connection Council helps manage the programs and activities offered by Family Connection. Throughout the year, Family Connection hosts events like the Garnet & Gold Silent Auction, FSU Chats, Coffee and Conversations, and Notes to Your ‘Nole.

For more information about New Student & Family Programs or any of the programs and initiatives mentioned above, please visit <http://dsst.fsu.edu/nsfp/>. For questions, please contact New Student & Family Programs at (850) 644-2785 or via e-mail at DOS-NSFP@fsu.edu.

The **Office of Accessibility Services (OAS)** is committed to ensuring universal access for each Florida State University student. Through the provision of academic, housing and dining accommodations, testing support, facilitation of equal access to programs and services, assistive technologies, and a welcoming space for students to feel part of the FSU community, the OAS creates an environment of success. Applications for students to utilize these services can be found on the OAS website or by visiting the office. In addition to the OAS Testing Center, the OAS maintains the **Theodore and Vivian Johnson Adaptive Technology Lab**, a facility that houses computers and adaptive equipment, which supports students with disabilities as they navigate their academic programs. Any student in need of accommodations should contact the Office of Accessibility Services 108 Student Services Building, or call (850) 644-9566 or (850) 644-8504 (TDD), or visit <http://dsst.fsu.edu/oas>.

The **Victim Advocate Program** provides free, confidential advocacy services to victims of crime. An advocate is on-call twenty-four hours a day to respond to Florida State University students, faculty, and staff who are victimized, and to any person victimized on Florida State University’s campus or by a member of the FSU community. The services offered include emotional support, evaluation of legal or medical options, crisis intervention, instructor notification, academic support, referrals to campus and community partners, and educational programming for the campus community. For information call (850) 644-7161 or (850) 644-2277, or visit <http://dsst.fsu.edu/vap>. After hours, call (850) 644-1234 and ask for an advocate.

The **Withdrawal Services** staff provides support to students and their families when a student’s enrollment is unexpectedly interrupted for personal, medical, or mental health reasons, and/or other crises. The Withdrawal Advisor explains the withdrawal application process and its various stages, evaluates grade liability for completed coursework, refers students to their Academic Dean and offers other University support services as needed, notifies each student of the final decision, and maintains a University record of the completed withdrawal. Before meeting with the Withdrawal Advisor, students should meet with their Academic Dean to discuss the implications of withdrawing, the viability of their withdrawal application, and any alternative academic options that may exist. Academic Deans and their staff evaluate applications and make a final determination to approve or deny student withdrawals from a semester of enrollment. For more information call (850) 644-1741 or <http://withdrawal.fsu.edu>.

The **Student Affairs Investigations and Assessment** team reviews reports of student organization misconduct that is not of a criminal or Title IX nature to review for possible violations of the Student Conduct Code or Student Organization Conduct Code. The Student Affairs Investigations and Assessment team will investigate reports of possible misconduct and provide a report to the Office of Student Conduct and Community Standards for follow up. For more information call (850) 644-2428.

Office of Fraternity and Sorority Life

The **Office of Fraternity and Sorority Life** advises and advocates for the more than 7,000 students involved with fraternities and sororities. These fifty-five organizations are divided into the following governing councils: twenty-three chapters of the Interfraternity Council (IFC), ten chapters of the Multicultural Greek Council (MGC), six chapters of the National Pan-Hellenic Council (NPHC), and seventeen chapters of the Panhellenic Association. Fraternities and sororities at Florida State University provide students with an opportunity to establish community and build a strong support group while furthering the ideals of scholarship, leadership and service. These organizations have been an integral part of the holistic education and development of students since 1904.

Oglesby Union, Askew Student Life Center, and FSU Flying High Circus

The **Oglesby Union** is the community center of student life on campus, hosting a variety of cultural, educational, social, and recreational activities. The Oglesby Union Complex is comprised of the Crenshaw, Davis, Turner, Student Services and Student Activities buildings as well as the Askew Student Life Center, Moore Auditorium and the Haskins Circus Complex. Union facilities include a student activities and involvement center; an entertainment club; restaurants; study and television lounges; an arts center and gallery; a bowling, billiards, and gaming center; lost and found; automatic teller machines; information center; student organization offices; meeting rooms; auditorium; and ballrooms. The Oglesby Union complex is also home to the Student Government Association, student mailboxes/post office, UPS Store, and Computer Lab.

The Oglesby Union coordinates multiple University-wide events including Welcome Week and Family Weekends. Welcome Week welcomes incoming and returning students the week prior to the beginning of Fall semester classes. Family Weekends welcome parents and families to campus to share in the FSU experience with their students in the Fall, and the Spring.

The Oglesby Union comprises multiple offices providing services, support, and programming for the university community. The Art Center offers a variety of classes and programs including Paint-a-Pot, Painting Express, and a full-service frame shop. You can enjoy rotating exhibits and artwork at the Oglesby Gallery, located on the second floor of the Oglesby Union in the Krentzman Lounge. Crenshaw Lanes has been a tradition at FSU since 1964. Featuring twelve bowling lanes and ten billiards tables, Crenshaw Lanes provides fun and healthy activities for FSU students. The Union provides space that can be reserved for a variety of events through the Guest Services department. Space may be reserved for meetings, conferences, social events, and banquets. Recognized Student Organizations may request space by stopping by the **Campus Event Services** office in the Krentzman Lounge of Oglesby Union, visiting them online at <https://reservations.dsa.fsu.edu/> or by calling them at (850) 644-6083.

Union Productions sponsors over one hundred and twenty programs and events a year, including an array of bands, comedians, and special events through the Oglesby Union’s hotspot—The Club Downunder, and other venues on and off campus.

The **Askew Student Life Center (ASLC)** is a programming space featuring a 380-seat state-of-the-art theatre, video and computer gaming, meeting space, and a coffee shop. The University Housing offices and the University Counseling Center are all located in the ASLC.

Florida State University’s **Flying High Circus**, a component of the Union, is one of only two collegiate circuses in the nation. Founded in 1947, the circus has delighted audiences at home and abroad with performances such as juggling, balancing, and aerial acts. Students work as their own riggers, put up the big top, and assist with audio and lighting production. The Flying High Circus performs on campus in the Fall during Family Weekend and in the Spring for the Annual Home Show Series. A group of circus performers performs in the Summer in Callaway Gardens, and another group hosts a Camp for Kids in Tallahassee.

The **Oglesby Union Board** represents the University community to ensure that the facilities, services, and amenities offered by the Oglesby Union Complex meet the needs and interests of their constituents. The Board is made up of twelve students, two faculty, two staff, and one alumnus. Union Board elections take place in the Spring semester. The Union Board office is located in the SAC (A305).

For more information on the Oglesby Union and all of the departments mentioned above, please visit <http://union.fsu.edu>.

Student Conduct and Community Standards

The department of Student Conduct and Community Standards administers student conduct procedures in accordance with the Student Conduct Code and maintains official student conduct records. An emphasis is placed upon educating students about their rights and responsibilities as members of the University community. University codes and policies pertaining to students can be found in the Florida State University Student Handbook and the “Academic Regulations” chapter of this General Bulletin. For more information regarding student conduct procedures, call (850) 644-5136, or visit <http://dsst.fsu.edu/srr>.

Student Engagement

The department of Student Engagement cultivates environments of student connection, engagement, inclusion, and experiential learning. We create and support tailored opportunities for students’ personal and professional growth, where they practice leadership, use voice, manage funds and resources, and

are actively engaged members of their community. Whether getting involved in a recognized student organization (RSO), running for office, showing your school spirit at Homecoming or a True Seminole Tailgate, participating in Market Wednesday or a Student Life Cinema event, or giving back to our community through the Big Event or Dance Marathon, there are dozens of ways for students to get involved and engaged. The Student Governance and Advocacy staff supports the Student Government Association, identity-based student unions, Congress of Graduate Students, Freshmen and Transfer Student Leadership initiatives, student organization accounting and money management, student publications and media, campus tradition programming, and student-driven events, vigils, and activities.

Student Government Association (SGA) is the student's voice at Florida State University. The mission of SGA is to provide "quality leadership for, and accountability to, its constituency by recognizing that strength arises from diversity, engagement, and dialogue". Elected and appointed officials enjoy many opportunities to acquire leadership and administrative skills and to serve their fellow students and the University. SGA annually allocates approximately \$13 million of activity and service fees. SGA funds or partially funds activities of the student senate, the executive branch, student government agencies, and numerous student organizations and University units. Those units receiving funds include the Campus Recreation, Oglesby Union, Child Development Center, COGS, Homecoming, the Golden Tribe Lecture Series, the Asian American Student Union, the Black Student Union, the Center for Participant Education, the Hispanic/Latino Student Union, the Inter-Residence Hall Council, the Pride Student Union, the Women Student Union, the Veteran Student Union, Student Council for Undergraduate Research and Creativity, Class Councils, First Responders Unit, SAFE (escort service), the SGA Publications Office, the Office of Governmental Affairs, WVFS V-89 (student-run radio station), and the College Leadership Councils. This means that a majority of events on campus are free to FSU students. For more information on these offices or services, please visit our website at <http://www.sga.fsu.edu>.

The Congress of Graduate Students (COGS) is an elected body of all post-baccalaureate, graduate, professional, and doctoral students at the University. COGS is a unified voice and advocate for all graduate-related matters. It also offers travel grants to graduate students, funds graduate organizations, and sponsors a variety of programs and services.

Student Organizations and Involvement supports more than 650 student organizations on-campus as well as FSUs Homecoming, True Seminole Tailgates, Dance Marathon, The Big Event, Relay for Life, Welcome Week and other campus events! Students can visit Nole Central to learn more about the array of student organizations or meet fellow students and organizations each Wednesday at a favorite FSU tradition, Market Wednesday! If you're not sure where to start stop by our office for involvement consultation or visit us online at <https://nolecentral.dsa.fsu.edu>.

The **Student Life Cinema** is one of the nation's leading campus movie programs, showing a variety of free films to FSU students each week in the 380-seat state-of-the-art theatre. Selected by FSU students, movies include blockbusters, foreign films, classics, midnight favorites, indie hits, and advance screenings. Beyond films, ASLC Gaming offers opportunities for the casual gamer to the professionals. In addition to Alienware Aurora R7s and high-speed Wi-fi, the ASLC Cyber Café is equipped with various game consoles, vintage and new! Bi-weekly events like Tabletop Tuesdays and Thursday Throwdowns serve audiences from board game lovers to competitive fighting game enthusiasts. Our monthly Final Friday has dozens of freeplay games, with Rock Band on stage, VR, and Just Dance. Our student-run coffee shop, The Grindhouse, serves lattes, cappuccinos, smoothies, muffins, and more! Grab a bite and relax with friends in our lobby. Learn more online at <https://union.fsu.edu/movies>.

University Health Services

University Health Services (UHS) provides a coordinated continuum of care through prevention, intervention, and treatment services. Services include general medical care, priority care, women's care, psychiatry, annuals, allergy injection clinic, immunizations, nutrition, confidential HIV testing, diagnostic imaging, physical therapy, and a medical response unit. UHS bills the student's insurance for any charges incurred.

Additionally, there are vendors providing dental, chiropractic, and massage care in the Health and Wellness building.

UHS clinical staff includes board-certified physicians, psychiatrists, advanced registered nurse practitioners, physician assistants, licensed practical nurses, x-ray technologists, registered nurses, physical therapists, and dietitians. The health center has more than one hundred full-time employees and also employs many part-time and student staff members.

The 140,000 square foot Health and Wellness facility has ample space dedicated to comprehensive prevention and treatment services for FSU students. UHS offers a volunteer Medical Response Unit which trains students as advanced first responders who then serve the campus community.

All students must meet State Board of Education immunization requirements. Immunization requirements for FSU are explained in the Health Compliance checklist, which can be found at <http://www.uhs.fsu.edu>. Immunization documents can be faxed, mailed, hand-delivered, or submitted through the FSU electronic drop box to the Health Compliance Office. Immunization documentation forms must be submitted to the Health Compliance Office in sufficient time to be processed before the student will be able to register for classes.

All incoming full-time students are required to have health insurance coverage. As a condition of their admittance to Florida State University, all non-United States citizens on a J-1 or F-1 visa must have appropriate health insurance regardless of their credit hour load. Florida State University sponsors reasonably priced policies that meet insurance requirements for both domestic and international students. Information about the policies available for students is posted on the student insurance Web site at <http://www.studentinsurance.fsu.edu>. For student insurance policy information, students may call the Health Compliance Office at (850) 644-3608. Other insurance options for international students are also accessible on the student insurance Web site. Medical care outside the health center facility is the financial responsibility of the student.

The **UHS Center for Health Advocacy and Wellness** is dedicated to assisting FSU students in their academic success through individual, group, and population-based health and wellness initiatives. To maximize campus wellness, academic and personal success are supported by:

- Addressing environmental factors that reduce risk
- Educating about healthy lifestyles
- Promoting positive choices and behaviors
- Providing a coordinated continuum of care

The Center for Health Advocacy and Wellness also offers internships and educational opportunities. The UHS Center for Health Advocacy and Wellness mentors, trains, and advises "Healthy Noles," peer health educators. Healthy Noles are trained Peer Health Educators who make a positive impact on campus health and wellness through campus events, presentations and discussions with peers. Healthy Noles also have the opportunity to advocate for student health while working closely with CHAW staff. Members of Healthy Noles develop competency in public speaking, program development, and public health knowledge.

All students are encouraged to visit the University Health Services Web site at <http://www.uhs.fsu.edu> for more complete information, or call (850) 644-6230 or (850) 644-4567 for an appointment.

University Housing

University Housing provides exceptional living opportunities for students to succeed academically. Housing is offered in over 6,700 beds for full-time, degree-seeking, fee-paying students. Residence hall staff members seek to create living environments that foster the lifelong learning of every resident through the promotion of responsible citizenship, scholarship, appreciation of differences, personal wellness, and involvement. Rental rates and information about contracting for on campus housing can be found at <http://www.housing.fsu.edu>. For more information, see the "Housing" chapter of this *General Bulletin*.

Child Care

The **FSU Childcare and Early Learning Program** provides, for a fee, care and educational experiences for approximately 133 children, ages six weeks to four years of age. The center is located at 612 Copeland Street, just a quick walk from the main campus. The hours for the center are 7:30 a.m. to 5:30 p.m. Monday through Friday when classes at FSU are in session. Children of Florida State University students, faculty, staff, Alumni, as well as children of the greater community are eligible for services. Children of Florida State University students, faculty, and staff are given priority for enrollment. Space is limited, so please apply early. Applications are available at <http://www.childcare.fsu.edu>.

The FSU Childcare and Early Learning Development Program also provide sites for research by faculty members and graduate students in a variety of areas as well as a laboratory setting in which students may observe, complete practicums/internships, or work with young children. For additional information, contact *FSU Childcare and Early Learning Programs*, 612 Copeland St, Tallahassee, FL 32304-4174, (850) 644-7970, or visit the Web site at <http://www.childcare.fsu.edu>.

DSA Strategic Planning and Assessment

The Division of Student Affairs Strategic Planning & Assessment provides leadership, expertise, and technical assistance to the Division of Student Affairs in developing, conducting, and maintaining assessment, evaluation, and research projects. Results from these projects provide the DSA and the overall university community with an increased understanding of the impact of student affairs.

FSU Police Department

Florida State University's **Police Department** is responsible for all safety and law enforcement functions on campus. The four divisions of the department are administration, police operations, investigations, and support services. The office of police operations provides motor, bicycle, and foot patrol of the campus twenty-four hours daily. The Campus Police department is comprised of sworn law-enforcement officers and unsworn personnel to promote campus safety by presenting public-safety programs in classes, residence halls, and Greek and scholarship houses. The office of investigative services provides investigative expertise in matters involving violations on campus of municipal ordinances and applicable federal and state laws.

Florida State University's Annual Campus Safety and Fire Report, in compliance with the Campus Security Act of 1990, is published and distributed annually online, with hard-copy available upon request. The Campus Safety Report describes all safety programs and security services available at the University. It contains crime statistics; safety tips and emergency telephone numbers; policies concerning alcohol and drug use, emergency notifications, crime prevention, and sexual assault; and the process for reporting of crimes and other safety related resources. Copies are available through the FSU Police Department, online at <http://police.fsu.edu/> and via the **SeminoleSafe** App for the FSU Police Department.

The Student Government Association in partnership with the FSU Police Department offers **Student Alert Force and Escort (SAFE) Connection**, a free service available to students, faculty, and staff. Arrangements for an escort should be made by calling 644-SAFE (7233). Operating hours vary throughout the year. For more details, please visit <http://police.fsu.edu/>.

The **Blue Light Trail**, comprising over 430 strategically placed light poles with emergency call boxes, provides well-lit pathways around campus; additional light poles are currently under construction as part of ongoing renovation and construction projects. By pressing the call box button, students are connected with the campus police dispatcher. Students should take note of where the lights and call boxes are located and plan their routes at night accordingly. For more information, please refer to <http://www.its.fsu.edu/Communications/Emergency-Blue-Light-Telephones-EBLT>.

FSU ALERT is Florida State University's emergency notification system. If there is a condition which threatens the health and safety of persons on campus, University officials will warn the campus community using one or more of the available twenty-eight methods. For more information about FSU Alerts please visit www.alerts.fsu.edu.

Radio and Television

The University-owned and operated **WFSU-FM** and **WFSQ-FM** are Tallahassee's only listener-supported, noncommercial public radio stations. Listeners tune into classical music, jazz, big band, and new-age music on WFSQ, and listen to local and state news and information programs through National and Florida Public Radio on WFSU.

Florida State University students interested in a career in broadcasting are encouraged to participate in the station's volunteer and internship programs. Participants are given an opportunity to work within a professional public-radio setting and gain valuable experience in many facets of the station's operation, including programming, production, announcing, public relations, and management.

WFSU-TV is an award-winning, noncommercial public television station licensed to the State Board of Education and operated by Florida State University. One of the fastest growing PBS stations in the nation, it recently extended coverage to the western area of the state transmitting on Channel 56, **WFSG-TV**, Panama City.

Both WFSG-TV and WFSU-TV broadcast PBS favorites and locally produced programs that offer news and feature stories, sports events, and community-interest spots.

Fund-raisers, staffed entirely by volunteers, give students an opportunity to gain broadcasting experience as members of the camera crew or production staff. Another way to learn production, public relations, or fund-raising techniques is through a professional-level internship, available only to a few students who are willing to invest a great deal of time and energy.

WVFS Tallahassee 89.7FM, the Voice of Florida State, is FSU's round-the-clock student-run radio station. An Affiliated Project of the Student

Government Association and the College of Communication and Information, WVFS's mission is two-fold: to provide diversity in radio programming for the campus and community while serving as a top-notch training facility for those interested in gaining experience in radio station operations. WVFS airs new and different music, with an emphasis on independent artists, a wide array of specialty shows, and news and sports programming pertinent to students and the greater community.

Students enrolled at Florida State University are eligible to work at WVFS, regardless of major or class standing. Staff members work on a volunteer basis and may also earn class credit via School of Communication courses offered through the radio station (including Formative Experience credit). WVFS recruits for all positions (News, Sports, Announcing, Continuity, Development, Public Relations, and Production) three times a year, always during the first week of the fall and spring semesters, and mid-April for the summer. No experience is required. Students can tune in to 89.7FM—or stream online at <https://wvfs.fsu.edu>—for more information.

Seminole Dining

Nationally ranked culinary program Seminole Dining offers a variety of delicious dining options to conquer your hunger. On Florida State University's campus, Seminole Dining operates three all-you-care-to-eat residence dining halls and more than 30 retail locations, including popular national brands and FSUunique restaurants.

In need of a snack? Seminole Dining operates multiple convenience stores and school-specific cafes. Want coffee or tea? Seminole Dining boasts two Starbucks and one Argo Tea, and serves Tallahassee favorites, Lucky Goat Coffee Co. and RedEye Coffee. Up late studying? No problem. Several of our locations are open late or even 24 hours. Dietary restrictions or food allergies? We have a variety of menu items to meet most requests, plus a full-time dietician who can shape a balanced diet for you. We also offer a variety of vegan and vegetarian options in our dining halls and retail locations. With Seminole Dining's flexible meal plans, you will always have something to eat! We believe well-balanced, nutritious meals leads to academic excellence!

All dining locations accept cash, Dining Dollars, Visa, MasterCard, American Express, and the FSUCard. Visit the FSUCard Center in the Woodward Parking Garage to sign up and save money with a meal plan or to add money to your Dining Dollars account. New locations and events are always in the works. For updated information on all Seminole Dining has to offer, please visit <https://seminoledining.sodexomyway.com/> or call (850) 644-3663.

Student Veterans Center

For information about the programs and services offered by the Student Veterans Center, please refer to the Student Veteran Information chapter.

Transportation and Parking Services

Transportation and Parking Services (TAPS) is responsible for the administration of the parking and transportation programs on campus. The University requires students, faculty, staff, and visitors that park on campus to have a valid Florida State University parking permit. Student virtual parking permits (as well as many other permits and hang-tags) are valid from August 15 of one year to August 15 of the next year. Permit enforcement hours are from 7:30 a.m. to 4:30 p.m., Monday through Friday. All other parking regulations are enforced twenty-four hours a day. Transportation and Parking Services is located at *104 North Woodward Avenue*, 8:00 a.m. to 5:00 p.m., Monday through Friday. Student permits can be obtained online at <http://transportation.fsu.edu> or by coming to the office. Temporary permits are also available online or in the office.

The office has the authority to ticket, tow, or boot (immobilize) illegally parked vehicles and to charge for late payments of citations. Second level appeals of citations are reviewed by the Transportation Violations Appeals Board, an administrative body representative of the University community.

Parking on the University campus is limited. Students are strongly encouraged to walk, bike, carpool, or use **Seminole Express**, the University's free campus bus service. The Seminole Express has seven routes that serve on and off campus locations. The buses operate from 7:00 a.m. to 8:00 p.m., Monday through Friday during the Fall and Spring semesters, and from 7:00 a.m. to 5:00 p.m. in the Summer. Students needing evening transit services around campus and surrounding neighborhoods can use the **Nite Nole** bus route, which operates from 8:00 p.m. to 3:00 a.m., Monday through Saturday during the Fall and Spring semesters. Students, faculty, and staff with a valid FSUCard may also ride any StarMetro bus (City of Tallahassee public transportation) to any of the designated bus stops within the city at no charge. For more information about these and other transportation and parking services please visit: <http://transportation.fsu.edu>.

Bicycles on Campus

A bicycle can be a major investment, so be sure to protect your bike by registering it with FSUPD. This is a free service and is useful if your bike is stolen or tampered with. When parking your bike, make sure to secure it with at least one form of lock. Bicycle racks are available outside of almost every building on campus and are monitored by FSUPD. All Seminole Express and StarMetro buses are also equipped with bike racks so that you can bring your bicycle with you wherever you go. For more information, visit <https://transportation.fsu.edu/bicycles>.

FLORIDA'S STATEWIDE COURSE NUMBERING SYSTEM

Courses in this *General Bulletin* are identified by prefixes and numbers that were assigned by Florida's Statewide Course Numbering System (SCNS). This numbering system is used by all public postsecondary institutions in Florida and by participating non-public institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions. Students and administrators can use the online SCNS to obtain course descriptions and specific information about course transfer between participating Florida institutions. This information is available on the SCNS Web site, at <https://flscns.fldoe.org/>.

Each participating institution controls the title, credit, and content of its own courses and recommends the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed for that purpose by the Florida Department of Education in Tallahassee. Individuals nominated to serve on these committees are selected to maintain a representative balance as to the type of institution and discipline field or specialization.

Course Prefixes and Numbers

The course prefix and each digit in the course number have a meaning in the SCNS. The listing of prefixes and associated courses is referred to as the "SCNS taxonomy." Descriptions of the content of courses are referred to as "statewide course profiles."

The course prefix is a three-letter designator for a major division of an academic discipline, subject matter area, or sub-category of knowledge. The prefix is not intended to identify the department in which a course is offered. Rather, the content of a course determines the assigned prefix to identify the course.

The course number is a four-digit designator for the course level (first digit), century (second digit), decade (third digit), and unit (last digit). In the sciences and certain other areas, a "C" or "L" after the course number is known as a lab indicator. The "C" represents a combined lecture and laboratory course that meets in the same place at the same time. The "L" represents a laboratory course or the laboratory part of a course that has the same prefix and course number but meets at a different time or place.

Example of Course Identifier

For example, a freshman composition skills course is offered by eighty-four different public and non-public postsecondary institutions. Each institution uses "ENC_101" to identify its freshman composition skills course.

Prefix	Level Code	Century Digit	Decade Digit	Unit Digit	Lab Code
	(first digit)	(second digit)	(third digit)	(fourth digit)	
ENC	1	1	0	1	
In the SCNS taxonomy, "ENC" means "English Composition"	Represents the year in which students normally take the course at a specific institution, Freshman in this case	Freshman Composition	Freshman Composition Skills	Freshman Composition Skills I	No laboratory component in this course

General Rule for Course Equivalencies

Equivalent courses at different institutions are identified by the same prefixes and same last three digits of the course number and are guaranteed to be transferable between participating institutions that offer the course, with a few exceptions, as listed below in "Exception to the General Rule for Equivalency."

Transfer of any successfully completed course from one participating institution to another is guaranteed in cases where the course to be transferred is equivalent to one offered by the receiving institution. Transfer credit must be awarded for successfully completed equivalent courses and used by the receiving institution to determine satisfaction of requirements by transfer students on the same basis as credit awarded to the native students. It is the

prerogative of the receiving institution, however, to offer transfer credit for courses successfully completed that have not been designated as equivalent. Equivalencies are established by the same prefix and last three digits and comparable faculty credentials at both institutions.

For example, ENC 1101 is offered at a community college. The same course is offered at a state university as ENC 2101. A student who has successfully completed ENC 1101 at a Florida College System institution is guaranteed to receive transfer credit for ENC 2101 at the state university if the student transfers. The student cannot be required to take ENC 2101 again since ENC 1101 is equivalent to ENC 2101.

Note: Credit generated at institutions on the quarter-term system may not transfer the equivalent number of credits to institutions on semester-term systems. For example, 4.0 quarter hours often transfers as 2.67 semester hours.

Authority for Acceptance of Equivalent Courses

Section 1007.24(7), Florida Statutes, states:

Any student who transfers among postsecondary institutions that are fully accredited by a regional or national accrediting agency recognized by the United States Department of Education and that participate in the statewide course numbering system shall be awarded credit by the receiving institution for courses satisfactorily completed by the student at the previous institutions. Credit shall be awarded if the courses are judged by the appropriate statewide course numbering system faculty committees representing school districts, public postsecondary educational institutions, and participating nonpublic postsecondary educational institutions to be academically equivalent to courses offered at the receiving institution, including equivalency of faculty credentials, regardless of the public or nonpublic control of the previous institution. The Department of Education shall ensure that credits to be accepted by a receiving institution are generated in courses for which the faculty possess credentials that are comparable to those required by the accrediting association of the receiving institution. The award of credit may be limited to courses that are entered in the statewide course numbering system. Credits awarded pursuant to this subsection shall satisfy institutional requirements on the same basis as credits awarded to native students.

Exceptions to the General Rule for Equivalency

Since the initial implementation of the SCNS, specific disciplines or types of courses have been accepted from the guarantee of transfer for equivalent courses. These include courses that must be evaluated individually or courses in which the student must be evaluated for mastery of skill and technique. The following courses are exceptions to the general rule for course equivalencies and may not transfer. Transferability is at the discretion of the receiving institution.

- A. Courses not offered by the receiving institution
- B. For courses at non-regionally accredited institutions, courses offered prior to the established transfer date of the course in question.
- C. Courses in the _900–999 series are not automatically transferable, and must be evaluated individually. These include such courses as Special Topics, Internships, Apprenticeships, Practica, Study Abroad, Theses, and Dissertations
- D. Applied academics for adult education courses
- E. Graduate courses
- F. Internships, apprenticeships, practica, clinical experiences, and study abroad courses with numbers other than those ranging from _900–999
- G. Applied courses in the performing arts (Art, Dance, Interior Design, Music, and Theatre) and skills courses in Criminal Justice (academy certificate courses) are not guaranteed as transferable. These courses need evidence of achievement (e.g., portfolio, audition, interview, etc.).

Courses at Nonregionally Accredited Institutions

The SCNS makes available on its home page (<https://flscns.fldoe.org/>) a report entitled "Courses at Nonregionally Accredited Institutions" that contains a comprehensive listing of all non-public institution courses in the SCNS inventory, as well as each course's transfer level and transfer effective date. This report is updated monthly.

SCNS Contact Information

Questions about the SCNS and appeals regarding course credit transfer decisions should be directed to Andrea White in the *Office of Faculty Development and Advancement* or the *Florida Department of Education, Office of Articulation, 1401 Turlington Building, Tallahassee, FL 32399-0400*.

Special reports and technical information may be requested by calling the *Statewide Course Numbering System* office at (850) 245-0427 or at <https://flscns.fldoe.org/>.

COURSE PREFIXES, DEFINITIONS, AND LOCATIONS

How to Find a Course:

The following list presents course subjects alphabetically by letter prefix. The column to the right contains the school, department, and/or program(s) offering that course subject. The schools, departments, and/or programs can be found, alphabetically, in the “Academic Departments and Programs” section of this *Bulletin*, where each course offered in a given program is listed, including title, description, and credit hours.

Course Symbols

Prefix	Definition	Program(s)
ABT	Arabic Culture in Translation or Translation Skills	Modern Languages and Linguistics
ACG	Accounting: General	Accounting
ADE	Adult Education	Educational Leadership and Policy Studies
ADV	Advertising	Communication Corporate Communication Professional Communication
AFA	African-American Studies	African-American Studies
AFH	African History	History
AFR	Aerospace Studies	Aerospace Studies
AMH	American History	History
AML	American Literature	English
ANG	Anthropology: Graduate	Anthropology
ANT	Anthropology	Anthropology
APK	Applied Kinesiology	Education Psychology and Learning Systems Nutrition, Food and Exercise Sciences Sport Management
ARA	Arabic Language	Modern Languages and Linguistics
ARE	Art Education	Art Art Education
ARH	Art History	Art Art History Classics
ART	Art	Art
ASH	Asian History	Asian Studies Classics History
ASL	American Sign Language	Communication Science and Disorders
ASN	Asian Studies	Asian Studies
AST	Astronomy	Physics
ATR	Athletic Training	Nutrition, Food and Exercise Sciences
BCC	Basic Clinical Clerkships	Medicine
BCH	Biochemistry (Biophysics)	Biological Science Biomedical Sciences Chemistry and Biochemistry
BME	Biomedical Engineering	Chemical and Biomedical Engineering
BMS	Basic Medical Sciences	Biomedical Sciences Medicine
BOT	Botany	Biological Science
BSC	Biological Sciences	Biological Science Biomedical Sciences
BUL	Business Law	Risk Management/Insurance, Real Estate and Legal Studies
CAP	Computer Applications	Computer Science Scientific Computing
CBH	Comparative Psychology and Animal Behavior	Psychology

CCE	Civil Construction Engineering	Civil and Environmental Engineering
CCJ	Criminology and Criminal Justice	Criminology and Criminal Justice Public Safety and Security
CDA	Computer Design/Architecture	Computer Science Criminology and Criminal Justice
CEG	Civil Geotechnical Engineering	Civil and Environmental Engineering
CEN	Computer Software Engineering	Computer Science
CES	Civil Engineering Structures	Civil and Environmental Engineering
CGN	Civil Engineering	Civil and Environmental Engineering
CGS	Computer General Studies	Accounting Computer Science Educational Leadership and Policy Studies Information Teacher Education
CHD	Child Development	Family and Child Sciences
CHI	Chinese	Modern Languages and Linguistics
CHM	Chemistry	Biomedical Sciences Chemistry and Biochemistry
CHT	Chinese Culture in Translation or Translation Skills	Modern Languages and Linguistics
CIS	Computer Science and Information Systems	Computer Science Criminology and Criminal Justice
CJC	Corrections	Criminology and Criminal Justice Public Safety and Security
CJE	Law Enforcement	Criminology and Criminal Justice Public Safety and Security
CJJ	Juvenile Justice	Criminology and Criminal Justice Public Safety and Security
CJL	Law and Process	Criminology and Criminal Justice Public Safety and Security
CLA	Classical and Ancient Studies	Classics History
CLP	Clinical Psychology	Biomedical Sciences Psychology
CLT	Classical Culture in Translation or Translation Skills	Classics
CNT	Computer Networks	Computer Science Criminology and Criminal Justice
COA	Consumer Affairs	Retail, Merchandising and Product Development
COM	Communication	Communication Corporate Communication Molecular Biophysics Professional Communication
COP	Computer Programming	Business Analytics, Information Systems and Supply Chain Computer Science Criminology and Criminal Justice Information
COT	Computing Theory	Computer Science

CPO	Comparative Politics	Political Science Public Safety and Security
CPS	Comparative Policy Studies (Multinational)	Social Science
CRW	Creative Writing	English Professional Communication
CTE	Clothing and Textiles	Retail, Merchandising and Product Development
CWR	Civil Water Resources	Civil and Environmental Engineering
DAA	Dance, Emphasis on Activity	Dance
DAE	Dance Education	Dance
DAN	Dance	Dance
DEM	Demography	Sociology
DEP	Developmental Psychology	Biomedical Sciences Educational Psychology and Learning Systems Psychology
DIE	Dietetics	Nutrition, Food and Exercise Sciences
DIG	Digital Media	Art Scientific Computing
DSC	Domestic Security	Public Safety and Security
EAB	Experimental Analysis of Behavior	Biomedical Sciences Psychology
EAP	English as a Second Language for Academic Purposes	Teacher Education
EAS	Aerospace Engineering	Mechanical Engineering
EBD	Education: Emotional/Behavioral Disorders	Teacher Education
ECH	Engineering: Chemical	Chemical and Biomedical Engineering
ECO	Economics	Economics
ECP	Economic Problems and Policy	Economics Finance
ECS	Economic Systems and Development	Economics
ECT	Education: Career/Technical	Educational Leadership and Policy Studies
EDA	Educational Administration	Educational Leadership and Policy Studies
EDE	Education: Elementary	Teacher Education
EDF	Education: Foundations and Policy Studies	Educational Leadership and Policy Studies Educational Psychology and Learning Systems Teacher Education
EDG	Education: General	Educational Leadership and Policy Studies Educational Psychology and Learning Systems Teacher Education
EDH	Education: Higher	Educational Leadership and Policy Studies
EDM	Education: Middle School	Teacher Education
EDP	Educational Psychology	Educational Psychology and Learning Systems
EDS	Education Supervision	Teacher Education
EEC	Education: Early Childhood	Teacher Education
EEE	Engineering: Electrical and Electronic	Electrical and Computer Engineering
EEL	Engineering: Electrical	Electrical and Computer Engineering
EES	Environmental Engineering Science	Civil and Environmental Engineering
EEX	Education: Exceptional Child- Core Competencies	Biomedical Sciences Teacher Education
EGI	Education: Gifted	Educational Psychology and Learning
EGM	Engineering Science	Civil and Environmental Engineering Mechanical Engineering

EGN	Engineering: General	Civil and Environmental Engineering Industrial and Manufacturing Engineering Mechanical Engineering Statistics
EGS	Engineering: Support	Chemical and Biomedical Engineering
EIN	Industrial Engineering	Industrial and Manufacturing Engineering
ELD	Education: Specific Learning Disabilities	Teacher Education
EMA	Materials Engineering	Industrial and Manufacturing Engineering Mechanical Engineering
EME	Education: Technology and Media	Educational Leadership and Policy Studies Educational Psychology and Learning Systems Teacher Education
EML	Engineering: Mechanical	Mechanical Engineering
EMR	Education: Mental Retardation	Teacher Education
ENC	English Composition	English Geography Molecular Biophysics
ENG	English: General	English
ENL	English Literature	English
ENT	Entrepreneurship	Biomedical Sciences Medicine
ENV	Engineering: Environmental	Civil and Environmental Engineering
EOC	Ocean Engineering	Earth, Ocean, and Atmospher- ic Science
ESC	Earth Science	Earth, Ocean, and Atmospher- ic Science
ESI	Industrial/Systems Engineering	Industrial and Manufacturing Engineering
EUH	European History	Classics History
EUS	European Studies	Russian and East European Studies
EVI	Education: Visually Impaired-Blind	Teacher Education
EVR	Environmental Studies	Earth, Ocean, and Atmospher- ic Science Geography
EXP	Experimental Psychology	Psychology
FAD	Family Development	Family and Child Sciences
FIL	Film	Communication Motion Picture Arts
FIN	Finance	Finance
FLE	Foreign Language Education	Classics Teacher Education
FOL	Foreign Languages	Modern Languages and Linguistics
FOS	Food Science	Nutrition, Food and Exercise Sciences
FOT	Foreign Languages (In Translation)	Modern Languages and Linguistics
FOW	Foreign Languages, Comparative Literature (Writings)	Modern Languages and Linguistics
FRE	French Language	Modern Languages and Linguistics
FRT	French Culture in Translation or Translation Skills	Modern Languages and Linguistics
FRW	French Literature (Writings)	Modern Languages and Linguistics
FSS	Food Service Systems	Nutrition, Food and Exercise Sciences
GEA	Geography: Regional Areas	Geography

GEB	General Business	Accounting Business Analytics, Information Systems and Supply Chain Finance Management Marketing
GEO	Geography: Systematic	Biomedical Sciences Geography
GER	German	Modern Languages and Linguistics
GET	German Culture in Translation or Translation Skills	Modern Languages and Linguistics
GEW	German Literature (Writings)	Modern Languages and Linguistics
GFD	Geophysical Fluid Dynamics	Scientific Computing
GIS	Geography: Information Science	Geography
GLY	Geology	Earth, Ocean, and Atmospheric Science
GMS	Graduate Medical Sciences	Biomedical Sciences Medicine
GRA	Graphic Arts	Art
GRE	Classical Greek (Language Study)	Classics
GRW	Classical Greek Literature (Writings)	Classics Religion
HBR	Modern Hebrew Language	Modern Languages and Linguistics Religion
HEE	Home Economics Education	Family and Child Sciences
HFT	Hospitality Management	Hospitality
HIS	General History and Historiography	History
HMG	Hospitality Management: Graduate	Hospitality
HOE	Home Economics: General	Family and Child Sciences
HPS	History and Philosophy of Science	History and Philosophy of Science Religion
HSC	Health Sciences	Biomedical Sciences Nutrition, Food and Exercise Sciences Public Health Social Science
HUM	Humanities	Humanities Modern Languages and Linguistics
HUN	Human Nutrition	Nutrition, Food and Exercise Sciences
IDC	Interdisciplinary Computing	Information
IDH	Interdisciplinary Honors	Educational Psychology and Learning Systems

IDS	Interdisciplinary Studies	Art Art History Anthropology Biological Science Classics Communication Communication Science and Disorders Criminology and Criminal Justice Dance Earth, Ocean, and Atmospheric Science Economics Educational Psychology and Learning Systems English Family and Child Sciences Geography History History and Philosophy of Science Humanities Information International Affairs Management Medicine Modern Languages and Linguistics Motion Picture Arts Music Philosophy Political Science Professional Communication Psychology Religion Social Science Sociology Sport Management Statistics Teacher Education Theatre
IHS	Interdisciplinary Health Sciences	Biomedical Sciences Medicine
IND	Interior Design	Interior Architecture and Design
INP	Industrial and Applied Psychology	Psychology
INR	International Relations	International Affairs Political Science
INS	International Studies	International Affairs
ISC	Interdisciplinary Sciences	Biological Science Chemistry and Biochemistry Computer Science Earth, Ocean, and Atmospheric Science Materials Science and Engineering Psychology Public Safety and Security Science Teaching Scientific Computing
ISM	Information Systems Management	Business Analytics, Information Systems and Supply Chain
ISS	Interdisciplinary Social Sciences	Biomedical Sciences Social Science
ITA	Italian Language	Modern Languages and Linguistics
ITT	Italian Culture in Translation or Translation Skills	Modern Languages and Linguistics

ITW	Italian Literature (Writings)	Modern Languages and Linguistics
JPN	Japanese	Modern Languages and Linguistics
JPT	Japanese Culture in Translation or Translation Skills	Modern Languages and Linguistics
JPW	Japanese Literature (Writings)	Modern Languages and Linguistics
LAE	Language Arts and English Education	English Teacher Education
LAH	Latin American History	History
LAS	Latin American Studies	Latin American and Caribbean Studies
LAT	Latin (Language Study)	Classics
LAW	Law	Law
LDR	Leadership Studies	Educational Leadership and Policy Studies
LEI	Leisure	Event Management Recreation, Tourism and Events
LIN	Linguistics	Anthropology Communication Science and Disorders English Modern Languages and Linguistics Teacher Education
LIS	Library and Information Studies	Biomedical Sciences Information Teacher Education
LIT	Literature	English
LNW	Latin Literature (Writings)	Classics
MAA	Mathematics: Analysis	Mathematics
MAC	Mathematics: Calculus and Pre-calculus	Mathematics
MAD	Mathematics: Discrete	Mathematics Scientific Computing
MAE	Mathematics Education	Mathematics Teacher Education
MAN	Management	Business Analytics, Information Systems and Supply Chain Finance Management Marketing
MAP	Mathematics Applied	Earth, Ocean, and Atmosphere Science Mathematics Scientific Computing
MAR	Marketing	Business Analytics, Information Systems and Supply Chain Marketing
MAS	Mathematics: Algebraic Structures	Mathematics
MAT	Mathematics	Mathematics
MCB	Microbiology	Biological Science
MDE	Medical Electives	Medicine
MDU	Undergraduate Medicine Courses	Biomedical Sciences
MET	Meteorology	Earth, Ocean, and Atmospheric Science
MGF	Mathematics: General and Finite	Mathematics
MHF	Mathematics: History and Foundations	Mathematics
MHS	Mental Health Services	Educational Leadership and Policy Studies Educational Psychology and Learning Systems Teacher Education
MMC	Mass Media Communication	Communication Corporate Communication Professional Communication

MOB	Molecular Biophysics	Molecular Biophysics
MSL	Military Science and Leadership	Military Science
MTG	Mathematics: Topology and Geometry	Mathematics
MUC	Music: Composition	Music
MUE	Music Education	Music
MUG	Music: Conducting	Music
MUH	Music: History/Musicology	Music
MUL	Music Literature	Music
MUM	Music: Commercial/Management/Administration	Music
MUN	Music Ensembles	Music
MUO	Music: Opera/Musical Theatre	Music
MUR	Music: Church	Music
MUS	Music	Music
MUT	Music: Theory	Music
MUY	Music: Therapy	Music
MVB	Applied Music: Brasses	Music
MVH	Historical Instruments	Music
MVJ	Applied Music: Jazz	Music
MVK	Applied Music: Keyboard	Music
MVO	Applied Music: Other	Music
MVP	Applied Music: Percussion	Music
MVS	Applied Music: Strings	Music
MVV	Applied Music: Voice	Music
MVW	Applied Music: Woodwinds	Music
NGR	Nursing: Graduate	Nurse Anesthesia Nursing
NSG	Nursing	Nursing
NSP	Nursing: Special	Nursing
NUR	Nursing: Generic Undergraduate	Biomedical Sciences Nursing
OCB	Biological Oceanography	Earth, Ocean, and Atmospheric Science
OCC	Chemical Oceanography	Earth, Ocean, and Atmospheric Science
OCE	General Oceanography	Earth, Ocean, and Atmospheric Science
OCG	Geological Oceanography	Earth, Ocean, and Atmospheric Science
OCP	Physical Oceanography	Earth, Ocean, and Atmospheric Science Mathematics
ORI	Oral Interpretation	Communication
PAD	Public Administration	Public Administration and Policy
PAS	Physician Assistant	Medicine
PAX	Peace Studies	International Affairs
PCB	Process Biology (Cell/Molecular/Ecology/Genetics/Physiology)	Biological Science Psychology
PCO	Psychology for Counseling	Educational Psychology and Learning Systems
PEL	Physical Education Activities (General): Object Centered, Land	Sport Management
PEM	Physical Education Activities (General): Performance Centered, Land	Sport Management
PEN	Physical Education Activities (General): Water, Snow, Ice	Earth, Ocean, and Atmospheric Science Sport Management
PEO	Physical Education Activities (Professional): Object Centered, Land	Sport Management
PEP	Physical Education Activities (Professional): Performance Centered, Land	Sport Management
PET	Physical Education Theory	Educational Psychology and Learning Systems Nutrition, Food and Exercise Sciences Sport Management

PGY	Photography	Art
PHC	Public Health Concentration	Public Health Social Science
PHH	Philosophy, History of	Philosophy
PHI	Philosophy	Philosophy Religion
PHM	Philosophy of Man and Society	Philosophy Political Science
PHP	Philosophers and Schools	Philosophy
PHY	Physics	Biomedical Sciences Chemical Physics Physics
PHZ	Physics: Continued	Physics
POR	Portuguese Language	Modern Languages and Linguistics
POS	Political Science	Political Science Public Administration and Policy
POT	Political Theory	Political Science
POW	Portuguese Literature (Writings)	Modern Languages and Linguistics
PPE	Personality	Psychology
PRO	Prosthetics/Orthotics	Industrial and Manufacturing Engineering
PRT	Portuguese Culture in Translation or Translation Skills	Modern Languages and Linguistics
PSB	Psychobiology	Biological Science Educational Psychology and Learning Systems Psychology
PSC	Physical Sciences	Chemistry and Biochemistry Physics
PSY	Psychology	Psychology
PUP	Public Policy	Biomedical Sciences Political Science
PUR	Public Relations	Communication
QMB	Quantitative Methods in Business	Business Analytics, Infor- mation Systems and Supply Chain Finance Marketing Statistics
RCS	Rehabilitation Counseling Services	Educational Psychology and Learning Systems
REA	Reading	English
RED	Reading Education	Teacher Education
REE	Real Estate	Risk Management/Insurance, Real Estate and Legal Studies
REL	Religion: Undergraduate	Religion
RLG	Religion: Graduate	Religion
RMI	Risk Management and Insurance	Risk Management/Insurance, Real Estate and Legal Studies
RTV	Radio: Television	Communication Corporate Communication Professional Communication
RUS	Russian Language	Modern Languages and Linguistics
RUT	Russian Culture in Translation or Translation Skills	Modern Languages and Linguistics
RUW	Russian Literature (Writings)	Modern Languages and Linguistics
SCC	Security	Criminology and Criminal Justice
SCE	Science Education	Biological Science Chemistry and Biochemistry Earth, Ocean, and Atmospher- ic Science Teacher Education

SDS	Student Development Services	Educational Leadership and Policy Studies Educational Psychology and Learning Systems
SEC	Serbo-Croatian Language	Modern Languages and Linguistics
SED	Speech Education	Communication
SLL	Slavic Languages	History Modern Languages and Linguistics
SLS	Student Life Skills (Learning)	Educational Psychology and Learning Systems
SMT	Science or Mathematics Teaching	Teacher Education
SOP	Social Psychology	Psychology
SOW	Social Work	Biomedical Sciences Educational Psychology Social Work
SPA	Speech Pathology and Audiology	Biomedical Sciences Communication Science and Disorders
SPC	Speech Communication	Art History Biomedical Sciences Communication Corporate Communication Professional Communication
SPM	Sports Management	Sport Management
SPN	Spanish Language	Biomedical Sciences Modern Languages and Linguistics
SPS	School Psychology	Educational Psychology and Learning Systems
SPT	Spanish Culture in Translation or Translation Skills	Modern Languages and Linguistics
SPW	Spanish Literature (Writings)	Modern Languages and Linguistics
SRK	Sanskrit Language	Religion
SSE	Social Studies Education	Teacher Education
STA	Statistics	Statistics
SYA	Sociological Analysis	Sociology
SYD	Sociology of Demography/Area Studies/Sociological Minorities	Sociology
SYG	Sociology: General	Sociology
SYO	Social Organization	Biomedical Sciences Sociology
SYP	Social Processes	Biomedical Sciences Educational Psychology and Learning Systems Sociology
TAX	Taxation	Accounting
THE	Theatre Studies and General Resources	Theatre
TPA	Theatre Production and Administration	Theatre
TPP	Theatre Performance and Perfor- mance Training	Theatre
TSL	Teaching English as a Second Language	Teacher Education
TTE	Transportation Engineering	Civil and Environmental Engineering
TUT	Turkish Culture in Translation or Translation Skills	Modern Languages and Linguistics
URP	Urban and Regional Planning	Biomedical Sciences Urban and Regional Planning
URS	Urban and Regional Studies	Urban and Regional Planning
VIC	Visual Communication	Communication
WOH	World History	History
WST	Women's Studies	Women's Studies
ZOO	Zoology	Biological Science

THE UNIVERSITY GRADUATE EDITION

Florida State University Mission Statement

Mission

Florida State University preserves, expands, and disseminates knowledge in the sciences, technology, arts, humanities, and professions, while embracing a philosophy of learning strongly rooted in the traditions of the liberal arts. The University is dedicated to excellence in teaching, research, creative endeavors, and service. The University strives to instill the strength, skill, and character essential for lifelong learning, personal responsibility, and sustained achievement within a community that fosters free inquiry and embraces diversity.

Vision

Florida State University will be among the nation's most entrepreneurial and innovative universities, transforming the lives of our students and shaping the future of our state and society through exceptional teaching, research, creative activity, and service. We will amplify these efforts through our distinctive climate—one that places a premium on interdisciplinary inquiry and draws from the rich intellectual and personal diversity of our students, faculty, staff, and alumni. These three forces—entrepreneurship, interdisciplinary, and diversity—deepen FSU's impact and result in a powerful return to our students and the people of Florida for their continued support and trust.

University History

Florida State University, one of the largest and oldest of the twelve institutions of higher learning in the State University System of Florida, had its beginning as early as 1823 when the Territorial Legislature began to plan a higher education system. In 1825, the Federal Government reserved two townships for the purpose of maintaining two such institutions in the territory, and in 1845 the United States Congress, supplemental to the act admitting Florida as a state in the Union, added two more townships. This led to an 1851 act of the Florida Legislature establishing two seminaries, one to be located east and the other west of the Suwannee River.

By 1854 the city of Tallahassee had established a school for boys called the Florida Institute with the hope that the state could be induced to take it over as one of the seminaries. In 1856, the Legislature of Florida chose to accept the offer of the Institute's land and building and designated Tallahassee as the site of one of the state seminaries because of its railway connections, its "salubrious climate," and its "intelligent, refined, and moral community."

Francis Eppes, who spent his formative years on the estate of his grandfather, President Thomas Jefferson, at Monticello, in Virginia, and who shared his grandfather's views of the importance to a democracy of a liberally educated citizenry, was the Mayor of Tallahassee who made the offer. Eppes served as President of the Seminary's Board of Education for eight years and instilled in the institution the Jeffersonian ideals that characterize it today.

In February 1857, the institution began offering postsecondary instruction to male students as the Seminary West of the Suwannee River. The school first became coeducational the following year when it absorbed the Tallahassee Female Academy, begun in 1843 as the Misses Bates School. Thus the West Florida Seminary, founded in 1851, began operating in 1857, only twelve years after Florida achieved statehood. It was located on the hill where the Westcott Building now stands, which has been the site of an institution of higher education longer than any other site in Florida.

Classes were held at the West Florida Seminary from 1857 until 1863, when the state legislature changed the name to The Florida Military and Collegiate Institute to reflect the addition of a military section that trained cadets. During the Civil War, cadets from the school, ranging in age from 12 to 18, fought in the Battle of Natural Bridge and helped make Tallahassee the only Confederate capital east of the Mississippi not captured during the war. As a result of the brave action of the West Florida cadets in this battle, Florida State University's Army ROTC cadet corps is today one of only three in the nation authorized to display a battle streamer with its flag, a streamer which bears the words "Natural Bridge 1865." After the end of the war in 1865, however, Union troops under General McCook descended upon Tallahassee and occupied the city (including campus buildings), remaining for more than a month.

Following the war, the institution entered a period of growth and development. In 1884 the first diplomas, Licentiates of Instruction, were awarded, and by 1891 the Institute had begun to focus clearly on what we would today call postsecondary education; seven Bachelor of Arts degrees were awarded

that year. By 1897, the institution had evolved into the first liberal arts college in the state, and in 1901, it became Florida State College, a four-year institution, with the first master's degree offered in 1902. That year the student body numbered 252 men and women, and degrees were available in classical, literary, and scientific studies. In 1903, the first university library was begun. The following quote from the 1903 Florida State College Catalogue adds an interesting footnote to this period:

"In 1883 the institution, now long officially known as the West Florida Seminary, was organized by the Board of Education as The Literary College of the University of Florida. Owing to lack of means for the support of this more ambitious project, and also owing to the fact that soon thereafter schools for technical training were established, this association soon dissolved. It remains to be remarked, however, that the legislative act passed in 1885, bestowing upon the institution the title of the University of Florida, has never been repealed. The more pretentious name is not assumed by the college owing to the fact that it does not wish to misrepresent its resources and purposes."

In a 1905 reorganization of Florida's educational system by the legislature, the University of Florida in Gainesville was established and designated a men's school, and the Florida State College became a women's school called the Florida Female College. The male student body moved from Tallahassee to Gainesville, taking with it the fraternity system and the College football team, which had been state champions in 1902, 1903, and 1905. In 1909, the name of the college was changed to Florida State College for Women, an institution that grew to become the third largest women's college in the nation during the 1930s. The College became fully accredited in 1915, and a chapter of the national honor society of Phi Kappa Phi was installed in 1925, the year after the College was placed on the list of standard colleges and universities approved by the Association of American Universities and became a member of the Association of American Colleges. In 1935, the first chapter of Phi Beta Kappa in the state, Alpha Chapter of Florida, was installed at the College, a mark of its status as a true liberal arts college.

The year 1947 saw many changes. Demand by returning World War II veterans had brought men back to the campus in 1946 with the establishment of the Tallahassee Branch of the University of Florida and in 1947 caused the Legislature to return Florida State College for Women to coeducational status and name it Florida State University. A permanent president's residence was acquired. The student body, numbering 4,056, chose a new alma mater and selected the Seminole as its mascot. The Flying High Circus was born, and football was started again when the first home game since 1905 was played in October. Three years later, Campbell Stadium was built. The first Student Union was established and housed in the "O Club" on West Campus, a former Army Air Base which mainly housed male students and provided some classroom space three miles west of the main campus.

The 1950s brought significant development and expansion to the University. To the colleges and schools that had existed since the Florida State College days—Arts and Sciences, Education, Home Economics, and Music—were added Library Science (in 1948), Social Welfare (later split into Social Work and Criminology), Business, and Nursing. A student in the Department of Chemistry was awarded the University's first Doctor of Philosophy (PhD) degree in 1952. A new building was completed for the Developmental Research School, which in 1905 had evolved from the High School and the College Academy of earlier days as the Observation and Practice School created to provide on-site opportunities for experience and research to students in education. Tully Gymnasium, Strozier Library, and the Business Building were completed to enhance the education of the ever-increasing student population. In 1957, the Panama Canal Branch was opened.

In the 1960s, the University acquired the Shaw Poetry Collection, established the Institutes of Molecular Biophysics and Space Biosciences, and constructed nine new buildings, including the Oglesby Union and the Fine Arts Building. During this period, the Program in Medical Sciences was established. The first black student enrolled in 1962, and the first black PhD candidates graduated in 1970. Programs in African American Studies and Women's Studies were established. Continuing the liberal arts tradition begun in the 1890s, the Liberal Studies Program required of all undergraduates was expanded and strengthened.

In each succeeding decade, Florida State University has added to its academic organization and now comprises sixteen colleges, the Graduate School, the Dedman School of Hospitality, and the Jim Moran College of Entrepreneurship. It has expanded from the original few acres and buildings

to 384 buildings on 1,633 acres, including the downtown Tallahassee main campus of 485 acres; a farm, which for many decades supplied the Florida State College for Women with food; the Seminole Reservation—a recreational facility; the Marine Laboratory on the Gulf Coast; the FAMU–FSU College of Engineering facility; the National High Magnetic Field Laboratory and Division of Research at Innovation Park; and the branch campus in Panama City, Florida. One hundred and sixty-eight years after its founding, Florida State University started the 2019-2020 academic year with a student population of over 42,000 and recognition as a major graduate research institution with an established international reputation.

In Fall 2019, Florida State University enrolled students from all fifty states, the District of Columbia, and 131 foreign countries. The enrollment breakdown by class included 600 law (JD) students, 480 medical (MD) students, a total of 33,000 undergraduate students, a total of 8,714 graduate students, and a total of 1,162 non-degree-seeking students. Out of 42,876 students enrolled at the University that semester, 42.9 percent were men and 57.1 percent were women. The University employed a total of 2,524 faculty members in Fall 2019, 55.0 percent men and 45.0 percent women.

The Panama City Campus is located on beautiful North Bay, one hundred miles west of Tallahassee, near the Gulf of Mexico. The campus, with its modern classrooms and offices, has been designed to utilize the natural landscape of the site, creating an aesthetic and effective educational setting.

University Organization

Florida State University is one of twelve units of the State University System (SUS) of Florida. The State Board of Education (SBOE), established pursuant to Section 1001.01, Florida Statutes, on January 7, 2003, oversees education governance in the state through the Commissioner of Education, who serves as Secretary of the SBOE. The Florida Board of Governors (FBOG), established pursuant to Section 7(d), Article IX of the state constitution, coordinates the State University System. The FBOG oversees the thirteen-member Boards of Trustees for each of Florida's public universities through the Chancellor of the State University System of Florida. Florida State University's Board of Trustees sets the University's policies and goals and serves as its legal owner and final authority responsible for efficient and effective use of its resources.

The main campus of the University is located in Tallahassee, the state's capital. FSU International Programs has over sixty years of experience and ranks 12th in the nation in providing students with extraordinary study abroad experiences. Through our more than sixty academic programs, students can choose to study in over twenty locations throughout the world. Program opportunities include spring, summer, and fall semesters at our four study centers, summer terms in additional locations, Spring Break programs, First Year Abroad and First Semester Abroad for incoming freshmen, and international internships. The year-round study centers are located in Florence, Italy; London, England; Panama City, The Republic of Panama; and Valencia, Spain. Summer programs are currently being offered in locations including China, Costa Rica, Croatia, Czech Republic, France, Germany, Ireland, Peru, Russia, Switzerland, Tanzania, and Thailand. FSU credits are earned for all courses and are transferable within the US university system in accordance with each student's home university regulations.

The chief executive officer of Florida State University is the President. The President is assisted by the Provost (who is also the Executive Vice President for Academic Affairs), the Vice President for Finance and Administration, the Vice President for Faculty Development and Advancement, the Vice President for Student Affairs, the Vice President for Research, the Vice President for University Advancement, and the President of the Faculty Senate.

The President's Office also coordinates alumni affairs and the solicitation of external funds to support scholarships and loans for students, capital construction, excellence in academic programs, and intercollegiate athletics, along with coordinating programs to improve understanding and support of University academic programs and activities through its units, including governmental relations.

Additionally, University Communications reports to the Office of the President, and coordinates efforts to improve the public's understanding of the University's academic programs and activities through internal and external media, both print and electronic. It includes the Public Broadcast Center (public radio, public television, and public access channel), Publications and Media Relations.

The Division of Academic Affairs is responsible for the operation of the academic program of the University. It includes the Office of the Vice President for Faculty Development and Advancement, which interprets all faculty personnel policy, including faculty development and welfare, monitors all academic rules and regulations, including those related to academic integrity and grade appeals, and facilitates the operation of the Faculty Governance System of the University; The Graduate School, which is responsible for the graduate enrollment, general advisement, university fellowships, and special programs;

and the Division of Undergraduate Studies, which is responsible for undergraduate advisement, retention, and special programs. Further support is given by associate vice presidents and directors, who are responsible for such academic matters as continuing education, international programs, computing and information resources, learning systems, libraries, the Office of the University Registrar, the Office of Financial Aid, and the Office of Admissions.

The Division of Finance and Administration maintains the physical plant, administers the personnel program, and receives and disburses nearly all University funds.

The Division of Student Affairs offers and coordinates programs that provide housing, career guidance, health care, recreation, child care, self-governance, and enhancement of academic skills to students. It is also responsible for programs and services for international students, disabled students, and student activities and organizations.

The Division of Research coordinates all research programs and mediates between extramural sponsors and faculty conducting research, development, and training under such sponsorship.

The Division of University Advancement works to increase Florida State University's capacity for generating private philanthropy and volunteer support. It oversees the FSU Alumni Association, FSU Foundation, and Seminole Boosters.

The Faculty Senate is an elected representative body of faculty that establishes academic policy regarding admission and graduation of students, curricula, and academic standards, and advises and recommends about all matters affecting the academic program of the University.

Panama City Campus

In 1982, the Florida Legislature established a campus of Florida State University at Panama City. Located one hundred miles west of Tallahassee on beautiful North Bay, the Panama City campus provides opportunities for undergraduate and graduate study in eighteen programs leading to the bachelor's degree and eight programs leading to the master's degree. Undergraduates may complete their entire bachelor's degree at the Panama City campus in the programs offered or may transfer to the main campus with an Associate of Arts degree. The Panama City campus houses the College of Applied Studies and offers three baccalaureate degrees and three master's degrees independent of the main campus.

The Panama City campus strives to offer a personalized university experience. Classes are relatively small, thereby permitting an individualized approach to instruction and facilitating interaction between students and faculty.

Colleges

The academic organization of the University comprises sixteen colleges. One of these, the College of Engineering, is a joint program of the Florida Agricultural and Mechanical University (FAMU) and Florida State University. In addition to the Associate of Arts (AA) degree, the University offers 105 authorized baccalaureate degree programs, 123 authorized master's degree programs, 25 authorized advanced master's and specialist degree programs, 3 authorized professional degree programs, and 78 authorized doctoral degree programs. The following outlines the academic divisions:

College of Applied Studies

Programs: Corporate and Public Communication; Nurse Anesthesia; Professional Communication; Public Safety and Security; Recreation, Tourism, and Events

College of Arts and Sciences

Departments: Aerospace Studies; Anthropology; Biological Science; Chemistry and Biochemistry; Classics; Computer Science; Earth, Ocean and Atmospheric Science; English; History; Mathematics; Military Science; Modern Languages and Linguistics; Philosophy; Physics; Psychology; Religion; Scientific Computing; Statistics

Interdisciplinary Programs: FSU-Teach; History and Philosophy of Science; Interdisciplinary Humanities; Molecular Biophysics; Neuroscience; Women's Gender and Sexuality Studies

College of Business

Departments: Accounting; Finance; Management; Business Analytics, Information Systems and Supply Chain; Marketing; Risk Management/Insurance, Real Estate and Legal Studies

Interdisciplinary Programs: Business Administration and Law; Business Administration and Social Work

College of Communication and Information

Schools: School of Communication; School of Communication Science and Disorders; School of Information

College of Criminology and Criminal Justice

Interdisciplinary Programs: Criminology and Public Administration; Criminology and Social Work; Cyber Criminology

Dedman School of Hospitality

Departments: Hospitality and Tourism Management; Global Club Management and Leadership

College of Education

School: School of Teacher Education

Departments: Educational Leadership and Policy Studies; Educational Psychology and Learning Systems; Sport Management

Interdisciplinary Program: Law and Sport Management

FAMU–FSU College of Engineering

Departments: Chemical and Biomedical Engineering; Civil and Environmental Engineering; Electrical and Computer Engineering; Industrial and Manufacturing Engineering; Mechanical Engineering

College of Fine Arts

Schools: School of Art and Design; School of Dance; School of Theatre

Departments: Art; Art Education; Art History; Interior Architecture and Design

Interdisciplinary Program: Arts Administration

The Graduate School

Interdisciplinary Program: Materials Science and Engineering

College of Human Sciences

Departments: Family and Child Sciences; Nutrition, Food and Exercise Sciences

Jim Moran College of Entrepreneurship

Programs: Retail Entrepreneurship, Commercial Entrepreneurship, Textile and Apparel Entrepreneurship

Interdisciplinary Programs: Entrepreneurship and Hospitality; Entrepreneurship and Product Development

College of Law

Interdisciplinary Programs: Law and Business Administration; Law and Information Studies; Law and Information Technology; Law and International Affairs; Law and Oceanography; Aquatic Environmental Science; Law and Public Administration; Law and Social Work; Law and Sport Management; Law and Urban and Regional Planning

College of Medicine

School: School of Physician Assistant Practice

Departments: Biomedical Sciences; Clinical Sciences; Family Medicine and Rural Health; Geriatrics; Behavioral Sciences and Social Medicine

Interdisciplinary Programs: Neuroscience and Interdisciplinary Medical Sciences

College of Motion Picture Arts

College of Music

College of Nursing

College of Social Sciences and Public Policy

School: Reubin O'D. Askew School of Public Administration and Policy

Departments: Economics; Geography; Political Science; Sociology; Urban and Regional Planning

Interdisciplinary Programs: African American Studies; Asian Studies; Demography and Population Health; Environment and Society;

International Affairs; International Affairs and Law; Latin American and Caribbean Studies; Social Science; Public Administration and Criminology; Public Administration and Law; Public Administration and Social Work; Public Health; Russian and East European Studies; Urban and Regional Planning and Demography; Urban and Regional Planning and International Affairs; Urban and Regional Planning and Law; Urban and Regional Planning and Public Administration

College of Social Work

Interdisciplinary Programs: Law and Social Work; Social Work and Business Administration; Social Work and Criminology; Social Work and Public Administration

Institutes and Research Centers

The work of the colleges is facilitated by institutes and centers in which faculty and students from throughout the University work as interdisciplinary teams on research and service projects. The centers and institutes are heavily supported by external funds. They serve as actual and potential sites for cooperative projects staffed by faculty and students, and personnel from business and industry, and are significantly involved in supporting state agencies through research, development, and training.

The following are the Florida Board of Governors approved institutes and research centers:

Professional Development and Public Service

Center for Academic and Professional Development

The Frederick L. Jenks Center for Intensive English Studies

Learning Systems Institute

Institute of Science and Public Affairs

Center for Biomedical and Toxicological Research and Hazardous Waste Management

Center for Economic Forecasting and Analysis

Center for Information Management and Educational Services (CIMES)

Center for Prevention and Early Intervention Policy

Center for the Advancement of Human Rights

Florida Conflict Resolution Consortium and FCRC Consensus Center

Florida Resources and Environmental Analysis Center (FREAC)

Florida State Climate Center

Institute for Academic Leadership

Institute for Cooperative Environmental Research (ICER) (Inactive)

Institute of Science and Public Affairs (ISPA)

John Scott Dailey Florida Institute of Government

The Florida Center for Prevention Research

International Institutes

Florida–Costa Rica Linkage Institute (FLORICA) (Inactive)

College of Applied Studies

Science, Technology, Engineering and Mathematics (STEM) Institute

College of Arts and Sciences

Center for Anchored Phylogenomics

Center for Genomics and Personalized Medicine (joint with the College of Medicine)

Center for Humanities and Society (Inactive)

Center for Ocean-Atmospheric Prediction Studies (COAPS)

Center for Security and Assurance in IT (C-SAIT) (Inactive)

Geophysical Fluid Dynamics Institute (GFDI)

Institute for Cognitive Sciences

Institute of Molecular Biophysics (IMB)

Institute on Napoleon and the French Revolution

Institute on World War II and the Human Experience

Karst Environmental Center (KEC)

Middle East Center

Statistical Consulting Center

Winthrop-King Institute for Contemporary French and Francophone Studies

College of Business

Carl DeSantis Center for Executive Management Education
Center for Risk Management Education and Research
Florida Catastrophic Storm Risk Management Center
Human Resource Management Center
Institute for Applied Business Research
Jim Moran Institute for Global Entrepreneurship
Real Estate Research Center

College of Communication and Information

Center for Hispanic Marketing Communication
Communication and Early Childhood Research and Practice Center
Communication Research Center
Information Use Management and Policy Institute (Information Institute)
Institute for Digital Information and Scientific Communication (iDigInfo)
Institute for Intercultural Communication and Research (joint with Office of the Vice President for Student Affairs)
L.L. Schendel Speech and Hearing Clinic
Project Management Center

College of Criminology and Criminal Justice

Center for Criminology and Public Policy Research

Dedman School of Hospitality

International Center for Hospitality Research and Development (Inactive)

College of Education

Center for Education Research in Mathematics, Engineering and Science (CERMES)
Center for Postsecondary Success (CPS)
Center for Sport, Health and Equitable Development
Center for the Study of Technology in Counseling and Career Development
FSU COACH: Interdisciplinary Center for Athletic Coaching
Hardee Center for Leadership and Values
Interdisciplinary Center for Athletic Coaching (FSU COACH)

FAMU–FSU College of Engineering

Applied Superconductivity Center (ASC)
Center for Accessibility and Safety for an Aging Population (ASAP)
Center for Advanced Power Systems (CAPS)
Center for Intelligent Systems, Control, and Robotics (CISCOR)
Center for Resilient Infrastructure and Disaster Response
Center for Transportation and Public Safety
Energy and Sustainability Center (ESC)
Florida Center for Advanced Aero-Propulsion (FCAAP)
High Performance Materials Institute (HPMI)

Jim Moran College of Entrepreneurship

Retail Innovation Center

College of Fine Arts

Maggie Allesee National Center for Choreography

College of Human Sciences

Center for Advancing Exercise and Nutrition Research on Aging
Center for Couple and Family Therapy
Center on Better Health and Life for Underserved Populations
Florida State University Family Institute

Florida Health Equity Research Institute
Institute of Sports Sciences and Medicine (joint with the College of Medicine)

College of Law

Center for Innovative Collaboration in Medicine and Law (joint with the College of Medicine)

College of Medicine

Autism Institute
Center for Behavioral Health Integration
Center for Brain Repair
Center for Child Stress and Health
Center for Genomics and Personalized Medicine (joint with the College of Arts and Sciences)
Center for Innovative Collaboration in Medicine and Law (joint with the College of Law)
Center for Translational Behavioral Science
Center for Underrepresented Minorities in Academic Medicine (Inactive)
Center of Excellence for Patient Safety (Inactive)
Center on Global Health (Inactive)
Center on Medicine and Public Health
Florida Blue Center for Rural Health Research and Policy
Institute of Sports Sciences and Medicine (joint with the College of Human Sciences)

College of Motion Picture Arts

Torchlight Center for Motion Picture Innovation and Entrepreneurship

College of Music

Center for Music of the Americas
Center for Music Research
Institute for Infant and Child Medical Music Therapy

College of Nursing

Center for Indigenous Nursing Research for Health Equity
Tallahassee Memorial HealthCare Center for Research and Evidence Based Practice

College of Social Sciences and Public Policy

Center for Civic and Nonprofit Leadership
Center for Demography and Population Health
Center for Disaster Risk Policy
Center for the Study of Democratic Performance
Claude Pepper Center
DeVoe L. Moore Center for the Study of Critical Issues in Economic Policy and Government
Florida Center for Public Management
Gus A. Stavros Center for the Advancement of Free Enterprise and Economic Education
L. Charles Hilton Center for the Study of Economic Prosperity and Individual Opportunity
LeRoy Collins Institute
Pepper Institute on Aging and Public Policy

College of Social Work

Center for the Study and Promotion of Communities, Families and Children
Florida Institute for Child Welfare
Institute for Family Violence Studies
Institute for Justice Research and Development
Institute for Social Work Research (Inactive)
Trinity Institute for the Addictions (Inactive)

Office of the Provost

Institute for Successful Longevity

Office of the Vice President for Research

Center for Advanced Power Systems (CAPS)
Florida Climate Institute (FCI)
Future Fuels Institute (Inactive)

Office of the Vice President for Student Affairs

Florida Center for Interactive Media (FCIM)
Institute for Intercultural Communication and Research (joint with the College of Communication and Information)

Other Research and Instructional Units

Center for Academic and Professional Development

Director: William H. Lindner; **Associate Director:** Kerry McElroy

The Florida State University **Center for Academic and Professional Development (CAPD)** is the continuing education and academic program outreach entity for the campus, the community, and students of all ages everywhere. Housed in the Augustus B. Turnbull III Florida State Conference Center, the experienced staff of CAPD support a variety of learning opportunities as they provide services to colleges, departments, and students on campus and online. CAPD can be reached online at <http://learningforlife.fsu.edu>.

CAPD promotes lifelong learning and personal productivity enhancement. For example, CAPD offers:

Professional Development/Personal Enrichment. CAPD Online offers Introduction to Web Design, Web Application Development, Introduction to Digital Graphic Design, Spreadsheets for Business Environments, and the Certificate in Financial Planning. These courses are instructor-led and offer an online interactive experience. CAPD also offers a fully online, self-paced Professional Certification in Trauma & Resilience open to the public. CAPD also offers a fully online, self-paced Professional Certification in Trauma & Resilience, which is open to the public.

Test Prep Classes. CAPD also offers online and face-to-face courses in Test Prep for the GMAT, GRE, LSAT, and SAT.

Academic Credit. CAPD provides academic credit courses, including part-time degree and certificate programs for the non-traditional student. Courses are offered on campus and at a distance. Special courses and teacher institutes are held each Summer. CAPD also coordinates returning student scholarships for students twenty-three years of age or older.

CAPD continues to identify and develop new course offerings to support lifelong learners in their quest for personal enrichment and sustain successful careers.

CAPD's team can assist you with your training needs, Web-capturing your lessons, creating a custom website with a unique URL to link to your training, and/or convert your Web-captured materials to short videos with specific learning objectives.

The Center's professional staff of meeting planners is readily available to put their expertise to work helping you organize events. For more information, please visit <http://learningforlife.fsu.edu/fsu-conference-center-2/>.

The Florida State Conference Center

The Augustus B. Turnbull III Florida State Conference Center, located at 555 West Pensacola St., is adjacent to FSU's five-story St. Augustine parking garage. The Conference Center is approximately 47,000 square feet, featuring a gothic brick exterior and three floors to house a large auditorium, a 336-seat dining room, eight breakout rooms, an executive boardroom, food preparation facilities, and administrative offices. It employs the latest technology, including three video walls, LCD screens and live Webcasting in its conferencing rooms, and is capable of hosting anything from small meetings to large regional conferences. The Conference Center has a full service studio outfitted with industry standard equipment and capability, including teleprompting and Webcasting.

Campus Reimagined Initiative

Director: William H. Lindner

As FSU prepares for the next generation of students, the Campus Reimagined Initiative (CRI) is dedicated to creating a living and learning environment, built on a data-rich, technology-centric platform, where students can seek and acquire the knowledge they need to discover, develop, and fulfill their personal passion.

Center for Global Engagement

See the "International Education" chapter in this *Graduate Bulletin*.

Center for Intensive English Studies

See the "International Education" chapter in this *Graduate Bulletin*.

FSU International Programs

See the "International Education" chapter in this *Graduate Bulletin*.

Florida Center for Reading Research

Director: Don Compton

The Florida Center for Reading Research (FCRR) is a multidisciplinary research center at Florida State University that was established in 2002 by the Governor's office and the Florida Legislature. FCRR explores all aspects of reading research—basic research into literacy-related skills for typically developing readers and those who struggle, studies of effective prevention and intervention, and psychometric work on formative and summative assessments.

For more information on the Florida Center for Reading research visit <http://fcr.org/>.

The Florida Center for Public Management

Director: Ben Green

The Florida Center for Public Management (FCPM) was established in 1978 to provide assistance to elected leaders and public managers in state and local governments in Florida. Its staff of full-time, experienced management consultants is available to help these officials improve their operations through a variety of services, including executive development seminars, organizational improvement diagnoses, leadership and staff team-building workshops, and various problem-solving techniques. FCPM efforts include the Florida Certified Public Manager Program, a nationally recognized comprehensive training and development program for public sector managers. FCPM is a part of the Askew School of Public Administration and Policy.

To obtain further information about FCPM and its services, visit <http://www.fcpm.fsu.edu> or call (850) 644-6460.

The Florida State University Center for the Performing Arts

Director of the Conservatory for Graduate Actor Training: Greg Leaming

The Florida State University Center for the Performing Arts, located in Sarasota, Florida, is owned and managed by the FSU College of Fine Arts to support its graduate acting program. The center also houses the Asolo Repertory Theater Company, a professional theatre, and the Sarasota Ballet. This theatre is affiliated with the University to enrich the educational experiences of the master of fine arts acting students in residence, and to provide theatre experiences of the highest quality for the Sarasota community and the state. The Sarasota Ballet Company also performs in the center. The acting conservatory maintains its own theatre, an intimate 161-seat facility for University productions. The program is reputed to be one of the finest in America.

Florida State University – Republic of Panama

Rector: Carlos R. Langoni

Florida State University's Office of International Programs administers a permanent campus of approximately five hundred full-time students in the Republic of Panama. FSU-Panama offers a full program of courses at the lower-division level leading to the associate degree, undergraduate courses leading to the baccalaureate degree in selected majors, and graduate courses leading to the master's degree in International Affairs. The campus serves US citizens and residents in Panama, Panamanian citizens, and visiting scholars from throughout the world. Courses are taught by regular and adjunct faculty as well as rotating faculty from the Tallahassee campus; students from the Tallahassee campus also study at FSU-Panama, taking advantage of the resources of Panama and the ease of receiving full academic credit from the University. Internships are arranged for Tallahassee students majoring in fields ranging from biology to international business. A full range of facilities is offered at the FSU-Panama campus, including housing, an athletic complex, a library, technology-enhanced classrooms, laboratories, administrative offices, and student center. The campus is located in Clayton – the City of Knowledge – across from the Miraflores Locks of the Panama Canal and a few miles from the center of Panama City, the nation's capital.

FSU-Panama also offers additional courses and cultural activities of special interest to U.S. students who seek study-abroad opportunities, either for one semester or for a full year. For further information, please consult the

campus' Web site, <http://panama.fsu.edu/>, write to the International Programs office at A5500 University Center, call (850) 644-3272, or visit <http://www.international.fsu.edu>.

Institute for Cognitive Sciences

Director: Michael Kaschak

The institute was founded in 1984 for the encouragement of interdisciplinary research, communication, and graduate study in the cognitive sciences. Its members include faculty and graduate students from the fields of computer science, psychology, philosophy, linguistics, education, business, and physics. Research has involved computer modeling of memory and problem solving, artificial and computational intelligence, knowledge-based computer systems, fuzzy logic and soft computing (e.g., genetic algorithms and neural networks), computer diagnosis of novice difficulties in problem solving, similarities and differences between human and lower-animal cognition, cultural aspects of cognition and language, linguistics and cognition, formal and natural languages, philosophy of knowledge and cognition, philosophy of artificial intelligence, study of the brain, robotics, education, and vision. Recently, research into cognitive aspects of the management of technology and of the perception of its affordability/cost has been included. A specialized studies program is offered for graduate study in cognitive sciences.

Learning Systems Institute

Director: Jeffrey Ayala Milligan; **Associate Director:** Rabieh Razzouk

The Learning Systems Institute (LSI) is a multi-disciplinary research and development unit dedicated to improved human performance. LSI is a recognized world leader in the improvement of teaching, learning, and performance systems in school, business, industry, and military settings. LSI has generated more than \$500 million in externally funded research over its five-decade history. LSI's work provides a wealth of opportunities for graduate students to gain first-hand experience with cutting-edge research. LSI faculty and students have worked in over two dozen countries around the world, in addition to leading major research and development in the United States.

Founded in 1969, LSI is organized into two centers:

Florida Center for Research in Science, Technology, Engineering, and Mathematics (FCR-STEM). A multidisciplinary research center created by the Florida Legislature and competitively awarded to Florida State University in 2007, FCR-STEM helps the state of Florida improve STEM teaching and learning in grades K-12 and prepare students for higher education and STEM careers in the 21st century. Through impacts on teacher knowledge and classroom practice, FCR-STEM strives to improve student achievement in STEM fields, narrow student achievement gaps in STEM fields, and increase student pursuit of STEM fields.

Center for International Studies in Educational Research and Development (CISERD). CISERD works to improve learning and instruction in various countries through educational research and development. Toward this end, the center works with international partners in government, universities, and non-governmental organizations to build capacity that will enable policy makers, researchers, and educators to sustain international development projects and pursue future objectives. Organizations such as the U.S. Agency for International Development, the U.S. Department of State, UNICEF, CARE International, and various non-governmental organizations have entrusted CISERD with research and development work, as have government agencies in Indonesia, Ethiopia, the Philippines, India, Ukraine, South Africa, Nigeria, Egypt, Lebanon, Pakistan, Tuvalu, nations in Latin America, and elsewhere.

LSI's learning research focuses on STEM (science, technology, engineering, and math), communities of instruction, learning technologies, international development, workforce development, leadership, learning disabilities, libraries, early grade reading, literacy, school reform, assessment, accommodations and modifications for students with special needs, and teaching and learning. LSI's research into performance focuses on how individuals and organizations perform complex tasks and how to help them achieve performance goals.

To obtain further information about LSI, contact the *Learning Systems Institute*, 4600 UCC, Tallahassee, FL 32306-2540; or call (850) 644-2570. The Institute's Web site may be accessed at <https://lsi.fsu.edu/>.

Libraries

Dean of the University Libraries: Gale Etschmaier

The University Libraries provide print and electronic collections and a wide range of services to enhance the learning, teaching, research, and service activities of Florida State University. In support of this mission, the libraries' collection is approaching four million volumes, including access from any-

where in the world to hundreds of databases and more than 70,000 e-journals. Materials not available online or at the libraries may be requested through interlibrary loan or through the statewide UBorrow system, allowing FSU faculty and students to request delivery of books from over fifteen million volumes available at all state university libraries. Library faculty also offer classes and consultations to teach critical research and thinking skills. For those researchers unable to visit the libraries, online research services are available 24/7 and library staff offer outreach to dormitories and buildings across campus.

The Florida State University Libraries include seven libraries on campus: Strozier Library, Dirac Science Library, Claude Pepper Library, College of Music Allen Music Library, College of Law Research Center, College of Medicine Maguire Medical Library, and FAMU-FSU College of Engineering Library.

Library materials and services are also available at the FSU Panama City, Florida campus, at the Ringling Campus in Sarasota, Florida, as well as at FSU International Programs study centers in London, England; Florence, Italy; Valencia, Spain; and Panama City, Republic of Panama. The entire FSU community can search the University Libraries catalog via its Web site at <http://www.lib.fsu.edu>.

The **Robert Manning Strozier Library**, the University's main library, is located in the center of the main campus and occupies seven floors. Strozier Library is open one hundred and thirty-four hours each week during the Fall and Spring, providing around-the-clock research assistance and study spaces, and sees almost 1.8 million visitors each year. Its main floor is an undergraduate-focused Learning Commons, while its lower level is a graduate- and faculty-focused Scholars Commons. Strozier offers free academic tutoring and a robust range of academic support services and programming throughout the day and late into the night. Its collection includes a wide variety of research materials, primarily in the humanities and social sciences. The library serves as a regional depository for federal and Florida government documents as well as United Nations documents. In its technology labs, Strozier provides equipment, software, and facilities for listening to, viewing, creating, and editing multimedia materials. Internet-accessible computers, scanners, printers, and photocopiers are available throughout the library. Laptops, cameras, and other equipment are available for checkout. The Assistive Technology Lab provides adaptive equipment and software for students with disabilities.

University Libraries Special Collections and Archives materials are accessed in the Special Collections Research Center on the first floor of the Strozier Library, in a nearby Exhibit Room, and in the Mary Lou Norwood Reading Room on Strozier's second floor. Its collections comprise more than half a million items. Manuscript collections include Florida political collections, Southern business history, literary manuscripts, and local and regional Florida history. The rare books of Special Collections support a wide variety of disciplines and research interests. The collection includes books from small and private presses, first editions, limited edition works, cuneiform, and other items. Notable book collections include Napoleon and the French Revolution, Shaw Childhood in Poetry, William Morris Kelmscott Press, and Carothers Memorial Rare Bibles. Special Collections and Archives, which includes University Archives, Heritage Protocol, and the Claude Pepper Library, welcomes class visits and provides a hands-on learning environment for students. Heritage Protocol maintains the Norwood Reading Room on the second floor of Strozier Library, where rotating exhibits of FSU memorabilia are displayed.

The **Claude Pepper Library**, housed on-campus in the Pepper Center, was established in 1985 as the official repository for the Pepper Collection, a unique and multi-faceted collection of over a million items by and about U.S. Congressman Claude Pepper (1900-1989) and other prominent Florida political figures including manuscripts, photographs, audio/video recordings, and memorabilia. For more information, visit <https://www.lib.fsu.edu/pepper-library>.

The **Paul A. M. Dirac Science Library**, located on the west side of campus in the heart of the Science Center complex, serves students, faculty, and researchers in STEM fields from its central location. For more information, visit the library's Web site at <https://www.lib.fsu.edu/dirac-science-library>.

The **Warren D. Allen Music Library**, one of the Southeast's major music libraries, is located in the College of Music and contains a collection of over 200,000 recordings, scores, books, and periodicals. The library also maintains extensive online music subscriptions and databases that support the school's curriculum. Housed in 18,000 square feet of space with comfortable furnishings, listening and viewing stations, and a technology-enhanced seminar room, the Music Library provides students with impressive resources and surroundings. For more information, visit the library's website at <http://music.fsu.edu/library>.

The **College of Law Research Center** has a collection of nearly 500,000 volumes and offers an active program of legal research instruction, an experienced and helpful staff, and extensive collections of law and law-related

information. Legal research is facilitated via an array of electronic databases, including the LexisNexis, WESTLAW, and Bloomberg Law legal research databases. For more information, visit <http://www.law.fsu.edu/research-center/>.

The **College of Medicine Charlotte Edwards Maguire Medical Library** cultivates physicians who are expert learners, problem solvers, and agents of change, by providing a supportive environment with access to high quality, relevant, and current information from 21st century information resources. The library houses a collection of books and journals and provides access to a number of electronic medical databases. For more information, visit <http://www.med.fsu.edu/library/>.

The **Florida State University-Panama City Library and Learning Center** is located in Panama City, Florida and provides computers, e-books, e-journals, and research help. Students and faculty at this location may borrow materials housed at the Tallahassee campus libraries and may access all of the electronic resources the libraries offer. The 6,000 items in its collection of printed books and journals are available at the library of the neighboring campus of Gulf Coast State College. For more information, visit <http://pc.fsu.edu/students/library-and-learning-center>.

The **FSU Republic of Panama Branch Library** offers services and a collection of over 45,000 items to students at the FSU branch campus in Panama City, Republic of Panama. Students and faculty at this location may borrow materials housed at the Tallahassee campus libraries and may access all of the electronic resources the libraries offer. For more information, visit <http://lib.fsu.edu/libraries/panama>.

FSU Early Childhood Autism Program – Panama City Campus

Program Director: Emily (Nikki) Dickens

Unique to the Panama City Campus, the FSU Early Childhood Autism Program (ECAP) is a non-profit, community outreach program that provides home, school, and clinic-based Applied Behavior Analysis (ABA) therapy for clients diagnosed with developmental disabilities, including autism spectrum disorder. The primary mission of ECAP is to provide effective, evidence-based behavioral treatment for clients and the secondary mission is to provide supervised clinical training to Florida State University graduate students as part of their practicum with the ABA Master's Program at FSU Panama City. Service provided by ECAP include but are not limited to:

- Individualized skill and behavioral assessments
- Development and implementation of behavior treatment plans focusing on increasing important behaviors (e.g. language, social, and communicative skills) and decreasing problematic behaviors
- Parent consultation and training
- Direct 1:1 therapy and teaching with clients

ECAP graduate students conduct services under the supervision of doctorate and master's level board certified behavior analysts who hold national certification with the behavior analyst certification board. For more information about ECAP visit <http://pc.fsu.edu/about-us/grade-school-programs/ecap> or call (850) 770-2241.

L.L. Schendel Speech and Hearing Clinic

Director of Clinical Education: TBD

The dual mission of the speech and hearing clinic is to provide effective community service to improve the communication abilities of clients, and to provide a teaching and clinical research laboratory to develop exemplary assessment and treatment procedures for use by Florida State University students in speech-language pathology. Specific services include but are not limited to:

- Comprehensive speech-language assessment and intervention
- Hearing assessment, hearing aid dispensing, and other clinical services related to hearing impairment
- Assistive communication lab
- Dialect/Accent evaluation and reduction

Services are provided by graduate students under the direct supervision of faculty members. All professional staff members are licensed by the Florida Board of Speech Language Pathology and Audiology and certified by the American Speech Language Hearing Association.

Fees vary according to the nature of services. Students, faculty, and staff receive a reduced rate. Further information is available by calling: (850) 644-2238 (Voice and TDD).

Museum of Fine Arts

Director: Preston McLane

Located in Tallahassee, MoFA has a history of exciting projects – from lush painting to dynamic sculpture exhibitions, from challenging installations

to provocative photography shows. Every season begins with an international competitive exhibition that embraces all media and every semester closes with the youth and exuberance of the graduating artist exhibitions.

The Florida State University Museum of Fine Arts is a member of the Florida Association of Museums, Florida Art Museum Directors' Association, Florida Cultural Action Alliance, and Southeastern Museums' Conference and is accredited by the American Alliance of Museums.

Office of Distance Learning

Director: Robert Fuselier

The **Office of Distance Learning (ODL)** provides services to students, faculty, and staff that support student achievement in technology-mediated learning environments. For information on online design and instruction, teaching and learning technologies, and assessment and testing, visit ODL online at <http://odl.fsu.edu>. For more information on online programs, admissions and tuition, and student support, visit <https://distance.fsu.edu/>.

Administrative Support

Fiscal and Human Resources staff help departments develop and manage their online programs, providing a broad range of administrative services. For information on the development process and funding, budget requests, account management, regulatory support, and data and reporting, visit <http://odl.fsu.edu/online-programs>. For fiscal assistance, call (850) 645-9917 and for human resources assistance, call (850) 644-7531.

Assessment and Testing

The **FSU Testing Center** at University Center C-1100 provides secure, on-site testing for a variety of FSU and non-FSU examinations. Mark-sense form scanning services are offered, including online form viewing, item analysis, and reports. Assessment and Testing facilitates remote proctoring for FSU's distance learning students and administers FSU course evaluations on behalf of the university. For more information, visit <http://odl.fsu.edu/assessment-testing> or contact Assessment and Testing at (850) 644-3017 or testing@campus.fsu.edu.

Canvas and Learning technologies

ODL researches, integrates, and supports instructional technologies that enhance learning at FSU, including the **Canvas learning management system**. Canvas, which can be accessed at <https://canvas.fsu.edu>, allows technological and educational innovation at FSU by connecting people to and through instructional technology. The **Canvas development team** works with support systems and resources from multiple units across campus to integrate learning technology with other applications, ensuring a more efficient operation for all users. Communication between instructor and students is a central feature of Canvas, and for technical issues, assistance is always available through the **Canvas Support Center** and the FSU helpdesk system. Visit the Canvas Support Center at <http://support.canvas.fsu.edu> for answers to frequently asked questions, news, and resources. For technical assistance, call ODL Technical Support at (850) 644-8004 or e-mail canvas@fsu.edu.

Online Course Development and Faculty Support

ODL provides services to help departments and faculty deliver quality online courses and degree programs. **Instructional development faculty** offer consulting on course design, pedagogy, instructional technologies, and media. For online courses, ODL's media production studio provides state-of-the-art technology where the media productions team can help instructors create high-quality video and audio. Online courses in development undergo rigorous quality assessment by ODL faculty and the departments they serve. ODL provides training on the use of Canvas and the principles of universal design for learning as well as best practices in teaching online for instructors, teaching assistants, and course mentors. For more information on course development, call (850) 644-4635 and ask for an instructional development faculty member.

Online Programs and Student Support

FSU offers nationally ranked online programs, distinguished faculty, and a renowned strength in the arts, humanities, and sciences. The online programs are designed by the same faculty who teach the courses on the Tallahassee and Panama City campuses. Transcripts and diplomas granted by FSU show no distinction between online and on-campus students. A variety of graduate and postgraduate degrees, specialized studies, and specialist degree and certificate programs and courses are offered online at FSU, including the following:

Graduate Certificate

- Athletic Coaching
- Autism Spectrum Disorder
- Educational Leadership
- Emergency Management
- Health Information Technology

Human Performance Technology
 Information Architecture
 Information Leadership and Management
 Institutional Research
 Instructional Design and Technology
 Law Enforcement Intelligence
 Leadership in Executive and Administrative Development (LEAD) in Social Work
 Multicultural Marketing Communication
 Online Teaching & Learning
 Program Evaluation
 Project Management
 Psychiatric Mental Health Nurse Practitioner
 Reference Services
 School Librarian Leadership
 Speech-Language Pathology Prerequisites (BRIDGE)
 U.S. National Intelligence Studies
 Youth Services

Graduate and Postgraduate Degrees

Art Education
 Business Administration
 Communication Science and Disorders
 Criminology
 Curriculum and Instruction
 Educational Leadership and Policy
 Educational Psychology
 Information
 Information Technology
 Instructional Systems and Learning Technologies
 Juris Master (Financial Regulation and Compliance)
 Juris Master (Health Care Regulation)
 Juris Master (Legal Risk Management and HR Compliance)
 Law Enforcement Intelligence
 Management Information Systems
 Nursing Practice
 Public Administration
 Risk Management and Insurance
 Social Work

ODL academic program specialists support off-campus learners, from the prospective student's first inquiry through the final semester. Visit the student-facing website at <http://online.fsu.edu> for program inquiries. For more information, call (850) 644-4635 and ask for an academic program specialist or submit an inquiry at <http://online.fsu.edu/contact>.

Reserve Officers Training Corps

The University includes among its offerings both an Air Force and an Army Reserve Officer Training Corps (ROTC) program; students of Florida State University may apply for admission to the Navy ROTC Program offered through Florida Agricultural and Mechanical University (FAMU). Interested male or female freshmen and sophomores are encouraged to enroll and apply for a Navy or Marine Corps scholarship. Naval Science classes are listed in the *FAMU General Catalog* under "Division of Naval Sciences." The Air Force ROTC program is offered to students at FSU, FAMU, TCC, and the Embry-Riddle Aeronautical University extension campus at TCC. The classes are listed in this *General Bulletin* under "Aerospace Studies." For additional information, visit our Web site at <http://airforcerotc.fsu.edu/>, call (850) 644-3461, or stop by 212 Harpe-Johnson Hall. The Army ROTC Program is offered to FSU and TCC students. The classes are listed in this *General Bulletin* under "Military Science." For additional information, visit our Web site at <https://armyrotc.fsu.edu/>, call (850) 644-8806, or visit in person at 201 Harpe-Johnson Hall.

Seminole Productions

FSU's professional video production unit, Seminole Productions, housed in the College of Communication and Information, provides a variety of services to University departments. One major partner is the Florida State Athletics department. Seminole Productions produces over 120 live events and over seventy-five television shows every year for Athletics alone. In addition,

Seminole Productions has partnered with ESPN and Fox Sports to produce numerous live events and special television programming for their networks. Seminole Productions is also a leader in Stereoscopic (3D) production and programming. Mark Rodin and his team of professionals have been working in stereoscopic technology for over ten years, outpacing universities across the nation in this medium. FSU students have the opportunity to learn from industry professionals, working with state-of-the-art equipment on real world projects, as part of their coursework. Everything Seminole Productions staff does is on a professional level for real paying clients. This ensures students are ready to meet the challenges of real world production after graduation. So whether it is working on live events, television shows, in pre- or post-production, graphics and animation, or even 3D stereoscopic production, students have numerous opportunities to become involved in Seminole Productions.

Graduate Education

Dean of The Graduate School: Mark Riley

Graduate studies at Florida State University emphasize advanced degree programs that entail extensive research activities and preparation for careers in science, the arts, the humanities, the professions, and technological fields. The University's diverse curriculum leads to graduate degrees with flexible options that allow students to form the program most suited to their academic and career goals. Talented faculty ensure a steady exchange of ideas, information, and technical skills. Research and teaching assistantships and fellowships give graduate students the opportunity to work with these leaders in their fields while furthering their education.

The Dean of The Graduate School has University-wide responsibility for the quality of graduate education. The Graduate Policy Committee, a faculty committee appointed by the Faculty Senate of the University, is responsible for the determination of University-wide policies for the governance of graduate education. Within these policies and standards, deans of the various colleges administer their individual graduate programs.

The mission of The Graduate School is to advance the quality and integrity of graduate education.

The Graduate School:

- Assists Florida State University graduate students by providing advice on general academic matters, University-wide degree requirements, and information on the availability of financial assistance, including assistantships, fellowships, and scholarships; by granting approval for theses, treatises, and dissertations; and by fostering the development of their skills and knowledge to succeed as leaders in a global community
- Interacts with the Office of the Vice President for Faculty Development and Advancement and the Graduate Policy Committee to establish and provide oversight of policies affecting graduate education at the University
- Collaborates with Florida State University units, including all academic programs, departments, and colleges, as well as the Career Center, Center for Global Engagement, Health and Wellness Center, and University Libraries to address graduate student needs
- Works with national organizations such as the Council of Graduate Schools, the Association of the Public and Land-Grant Universities, and the National Research Council to promote the importance of graduate education

There are approximately 8,000 graduate and professional students enrolled at Florida State University. These students come from approximately one hundred and twenty-nine foreign countries and all fifty states.

The Graduate School administers the interdisciplinary master's and PhD programs in Materials Science and Engineering; University-wide graduate fellowship, grants, and awards programs; and several professional development programs for graduate students. For more information see "The Graduate School" chapter of the *Graduate Bulletin*.

Researchers in many disciplines take advantage of the University's location in Florida's seat of government. More than one hundred state and federal agencies provide students with opportunities for internships, research, and part-time jobs that match almost all areas of academic interest. Graduate students in such diverse fields as environmental science, urban and regional planning, social work, business, governmental affairs, population studies, public administration, and law are often funded by federal grants, supported by international organizations, and have ready access to state government information.

Faculty Distinction

It is the official policy of Florida State University to recruit the most talented faculty from leading centers of learning throughout the world. The University faculty has consistently included Nobel laureates, members of National and Foreign Academies, Pulitzer Prize winners, Guggenheim

Fellows, and Fulbright Scholars. Many of its members have received national and international recognition, and the University enjoys national ranking in a number of disciplines. The Provost rewards faculty members who receive awards recognized by the National Research Council as “Highly Prestigious” and “Prestigious” with permanent salary increases. The diversity and quality of the educational backgrounds of the faculty are reflected in the institutions that have granted their graduate degrees. A listing of distinguished faculty appears in this *Graduate Bulletin*.

Affiliations

The University participates in the Traveling Scholar Program (for graduate students), Academic Common Market, and Cooperative Programs within the State of Florida, Board of Governors. Florida State University is a member of the University Research Association; the Oak Ridge Associated Universities, Inc.; The University Corporation for Atmospheric Research; The Southeastern Universities Research Association; EDUCOM: The Interuniversity Communications Council; the American Association for Laboratory Animal Science; ALA: the American Library Association; the State University System’s Institute for Oceanography; the University Space Research Association; CAUSE: The Association for the Management of Information Technology in Higher Education and is a founding member of the iSchools movement.

Accreditation

Florida State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate, baccalaureate, master’s, specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097; or call (404) 679-4500 for questions about the accreditation of Florida State University. The Commission on Colleges is to be contacted *only* if there is evidence that appears to support the University’s significant noncompliance with a requirement or standard.

For departmental/field accreditations, refer to the respective college or school’s chapter in this *General Bulletin*.

Carnegie Foundation Classification

In its 2018 report, The Carnegie Foundation classified Florida State University in the “Doctoral Universities: Very High Research Activity” category, its highest category for a graduate-research university. Florida State University is one of 131 American universities (94 public) to have earned this designation. In addition, a 2020 report selected Florida State University for the Community Engagement Classification. This competitive designation recognizes Florida State’s commitment to exemplary institutional practices of engagement within its local, state, and global community.

GRADUATE ADMISSIONS

Director of Admissions: Hege Ferguson

Program Directors: Mike Sklens

Associate Directors: Lori Hamilton, Julie Rubin, Anthony Russo, Christina Smith

Assistant Directors: Tyler Eddinger-May, Allison Helms, Stephanie Robinson, Jermaine Williams

Panama City Campus Director: David Henry

General Information

Florida State University encourages applications for admission from qualified students regardless of race, creed, color, sex, religion, national origin, age, disability, veteran or marital status, sexual orientation, gender identity, gender expression, or any other protected group status in accordance with all pertinent federal, state, and local laws on non-discrimination and equal opportunity. Admission of students to Florida State University is within the jurisdiction of the University, but subject to minimum standards adopted by the Florida Board of Governors. Preference for admission for any term will be given to those applicants whose credentials indicate the greatest promise of academic success in their chosen program of study.

The application for admission is available online at <http://admissions.fsu.edu>. When applying for admission, the Federal Privacy Act of 1974 allows colleges and universities to require the disclosure of social security numbers for the purpose of identification and verification of student records, including registration, financial aid, and academic records, and for verification of identity in connection with the provisions of its services. The University does not use social security numbers for student identification; instead, the University assigns a Florida State University student identification number (EMPLID).

An application cannot be submitted earlier than one year prior to the term for which admission is desired. In addition, the University reserves the right to close admission earlier than the published deadline(s) if any program limit is reached.

The Office of Admissions will post all decisions electronically on the Application Status Check, an applicant's private account created at the time of application. Admission is for a specific term, and if the student is unable to enroll for the term indicated on the Application Status Check, the Office of Admissions should be notified immediately. A change in term will result in a re-evaluation of the application. The applicant should not assume that admission will automatically be granted.

The University reserves the right to request an evaluation of any international academic document. (For transfer credit, an official course-by-course evaluation is required.) We recommend this evaluation be done by a member of the National Association of Credential Evaluation Services.

Offers of admission to the University are often contingent upon the subsequent receipt of official college or university transcripts indicating satisfactory performance and verification of baccalaureate and master's degrees. Failure to submit such documents before the end of the second week of the initial academic term can result in the cancellation of admission and registration.

An application or residency statement submitted by or on behalf of a student that contains false, fraudulent, or incomplete statements may result in denial of admission or denial of further registration and/or invalidation of Florida State University credit and related degrees.

Prior to registering for classes, accepted students must be health compliant. For information regarding this requirement, refer to <http://uhs.fsu.edu>. Florida State University reserves the right to cancel the admission of any applicant whose health record indicates the existence of a condition that may be harmful to members of the University community.

Application

The application is available online at <http://admissions.fsu.edu>. It is recommended that the application be submitted nine to twelve months prior to the proposed term of enrollment.

A nonrefundable application fee of \$30.00 is required. Applicants can pay the application fee online via their Application Status Check at <https://admissions.fsu.edu/statuscheck/>. If payment is by check or money order, it must be made payable to Florida State University and drawn on a U.S. bank. The application will not be processed without this fee, and there are no provisions to have it waived or postponed, except for applicants in designated sponsored programs.

Deadlines for Applications and Supporting Documents for all Graduate Applicants*

The University deadlines for applications and supporting documents for all graduate applicants are:

Term	Application and Document Deadline
Fall	July 1
Spring	November 1
Summer	March 1

*Some departments may have earlier deadlines than those established by the University, or may admit only for a specific term.

Transcripts

An official transcript from each college and/or university attended must be submitted to the Office of Admissions. Transfer credit posted on the record of another institution is not accepted in lieu of submitting the official transcript from the original institution. Florida State University and other official transcripts already on file as part of the student's permanent record will be automatically obtained by the Office of Admissions. Transcripts are considered official when they are sent directly from the college or university to the Office of Admissions and contain an official seal and/or signature. Transcripts bearing the statement "Issued to Student," notarized transcripts, or transcripts submitted by the applicant are not considered official.

Original documents or signed, officially certified photocopies of original documents may be submitted by the student only when institutions outside the United States will not send academic records to other institutions. The verifying signature should be that of an officer of the institution attended. All academic records that are not in English must be accompanied by certified English translations. Certified documents should be true copies that are signed and dated by an educational official familiar with academic records. Documents signed by a notary or other public official with no educational affiliation will not be accepted.

Test Scores

Official test results will be required from a nationally standardized graduate admissions test, such as the Graduate Record Examination revised General Test (GRE), the Graduate Management Admission Test (GMAT), the Miller Analogies Test (MAT), or an equivalent test that is acceptable for the program to which the applicant is applying. These scores are considered official only when they are sent directly to the Office of Admissions from the testing agency. Examinee copies are not considered official.

Note: The Faculty Senate and Graduate Policy Committee have waived GRE and GMAT test requirements for the Fall 2020 term for Master's and Specialist applicants.

International applicants whose native language is not English must submit an English language proficiency exam, such as the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS), or the Pearson Test of English (PTE Academic). These scores are considered official only when they are sent directly to the Office of Admissions from the testing agency and are not valid after two years.

Departmental Requirements

All applicants should contact their academic departments for specific deadline dates and departmental requirements, such as departmental application, statement of purpose (letter of intent), résumé or curriculum vitae, letters of recommendation, audition or portfolio, and application for fellowship or assistantship. These supporting documents should be uploaded to the online application. **Do not mail departmental information to the Office of Admissions. It will delay the processing of your application.**

Graduate Student Admission Policies

Admission to graduate study involves acceptance to the department or college in which the applicant expects to earn a degree. Final admission to the University is subject to approval by the Office of Admissions. While there are minimum admission requirements established by the Florida Board of Governors, the University can elect to exceed them.

In order to meet minimum University admission requirements, the applicant must have:

- A bachelor's degree from a regionally accredited U.S. institution, or a comparable degree from an international institution, with a minimum 3.0 (on a 4.0 scale) grade point average (GPA) in all work attempted while registered as an upper-division undergraduate student working toward a baccalaureate degree, or
- A graduate degree from a regionally accredited U.S. institution, or a comparable degree from an international institution, and
- Test scores from a nationally standardized graduate admissions test that are acceptable for the academic program to which the applicant is applying.

In addition:

- An applicant who is not in good standing (on probation or dismissal) at the last institution attended will not be considered for graduate study.
- Departments may impose more restrictive admission requirements than those stated above. It is recommended that applicants contact the academic program directly for information on departmental admission requirements.
- An applicant who has not earned a degree from a regionally accredited U.S. institution, or a comparable degree from an international institution, may be considered for admission as a provisional graduate student. (International applicants cannot be admitted as provisional.) For information on provisional graduate status, see the subsection on 'Provisional Graduate Students' in this chapter.
- International applicants whose native language is not English are required to have a minimum score of 550 on the paper-based or 80 on the Internet-based TOEFL examination, 6.5 on the IELTS examination, 55 on the PTE Academic examination, or the successful completion of Level 8 (Advanced Level) at Florida State University's Center for Intensive English Studies. Some departments may require a higher score or may waive the test requirement if the student has received a bachelor's degree or master's degree from a U.S. institution or other institution where English is the required language of instruction. International students expecting to receive appointments as teaching assistants are required to pass the SPEAK test which evaluates the English-speaking ability of non-native speakers of English and is administered at Florida State University. Students who receive a score of 26 or higher on the speaking section of the Internet-based TOEFL examination meet the University requirement to serve in all capacities as a teaching assistant; however, some departments may still require that the student take the SPEAK test.

Provisional Graduate Students

An academic program may recommend that a student be admitted to the University as a provisional graduate student. This requires that the program stipulate conditions that the student must meet during the initial semester/term of enrollment. The student will remain in this provisional category for only one semester/term and must meet all of the stipulated conditions during the initial semester/term to continue in the program. Students entering the University under this category register in the same manner as regular degree-seeking students. International students cannot be admitted into the provisional category.

A provisional graduate student must be reviewed by the academic program and the University at the end of the initial semester/term to determine whether the stipulated conditions were met. If the conditions were not met, the student will not be able to continue in the program. While in provisional status a graduate student must register for graded graduate-level coursework (5000-level or above; excludes S/U courses) commensurate with the load requirements of the program and must earn at least an average of 3.0 for all graduate-level coursework taken.

A hold blocking future enrollment will be placed on the record of a student who fails to meet the stipulated conditions during the initial provisional semester/term; such students will be ineligible to continue in the academic program. Students who met the minimum requirements for admission to the University either initially or during the provisional semester but failed to meet the program-specific conditions may subsequently seek admission to a different academic program as a degree or non-degree seeking student. A provisional student who does not earn at least a 3.0 average during the initial provisional term is not eligible for probationary status in the subsequent semester. Otherwise, a provisional graduate student is subject to the retention and dismissal regulations appropriate to a regular graduate student. For information on non-degree classification, see the subsection on 'Non-Degree Students' in this chapter.

Continuous Enrollment

Please refer to the "Academic Regulations and Procedures" chapter in this *Graduate Bulletin* for continuous enrollment policies.

Readmission

Returning graduate degree-seeking students who (1) have been absent from the University for two or more consecutive terms (including Summer); (2) have been dismissed from the University and have been absent for two or more consecutive terms (including Summer); (3) have withdrawn from the University and have been absent for two or more consecutive terms (including Summer); (4) have had their last term of enrollment at the University administratively cancelled and have been absent for two or more consecutive terms (including Summer); or (5) have earned a graduate degree from the University and wish to enroll in a second graduate program, must submit an application for readmission to the Office of Admissions. Academically dismissed students are not eligible for readmission unless they have been reinstated by their academic dean. Reinstatement to continue does not guarantee a favorable readmission decision or admission into a specific major. Refer to the 'Dismissal and Reinstatement' section of the "Academic Regulations and Procedures" chapter of this *Graduate Bulletin*.

Students who have attempted college work (including correspondence work) at any college or university since their last enrollment at Florida State University must have official transcripts sent to the Office of Admissions. Transcripts are considered official when they are sent directly from a college or university to the Office of Admissions and contain an official seal and/or signature. Transcripts bearing the statement "Issued to Student," notarized transcripts, or transcripts submitted by the applicant are not considered official.

Returning graduate degree-seeking students who have been absent from the University for seven or more years or former provisional graduate students must submit a graduate application to the Office of Admissions according to the procedures prescribed for new admission.

The readmission application and all supporting documents should be submitted by the published deadline of the term for which readmission is desired. (Consult the "University Calendar" chapter of this *Graduate Bulletin* for specific deadlines.)

Readmitted students are subject to retention requirements in effect at the time of reentrance. In addition, students claiming Florida residency must reestablish their eligibility for this classification when applying for readmission.

Admission/Readmission Appeal Procedure

Applicants to graduate programs who meet minimum University requirements for admission and who are denied admission or readmission to a graduate program may request reconsideration of their applications. The following procedures apply for all applicants who seek review of an admission or readmission decision:

1. Written requests for reconsideration must be received by the Graduate School within thirty days of the notification of denial. Specific reasons for the request and all supporting evidence should be included with the appeal.
2. The Graduate School shall forward the appeal to the appropriate academic department within three working days.
3. The appeal shall be reviewed by a standing committee of the appropriate academic department. This committee shall be composed of members of the graduate faculty and at least one graduate student. The committee has thirty days to review the appeal.
4. Decisions by the committee shall be immediately forwarded to the Graduate School who will notify the applicant of the decision within seven days. This decision shall be final, and there shall be no further appeals.

Applicants who are denied admission or readmission to the University for judicial and/or conduct reasons may appeal by filing a written petition to the Admissions Committee through the Director of Admissions.

Readmission after Multiple Withdrawals

When a student has withdrawn from the University three or more times, subsequent readmission must first be considered by a committee whose charge it is to assess the student's capability of making satisfactory progress toward the degree. This committee, appointed by the Council of Associate and Assistant Deans, will make a recommendation to the dean of the student's college who will make the final decision.

Second Graduate Program

A student who has completed one graduate degree program at Florida State University must secure the approval of the proposed department before undertaking a second graduate program. Readmission is through the Office of Admissions. Work taken without such approval will not count toward a graduate degree.

Admission as Non-Degree Student

The non-degree student status is open to any post-baccalaureate student for either undergraduate or graduate coursework provided the student is in good academic standing at the last institution attended. Applicants who have been denied admission as degree-seeking students or who missed the deadline for submitting a degree-seeking application will not be considered for enrollment as a non-degree student. Registration begins the day before the beginning of the term and is on a space-available basis. In some cases, registration may require departmental approval.

The non-degree application is available online at <http://admissions.fsu.edu>. The completed non-degree application must be accompanied by a non-refundable \$30.00 processing fee and all official college transcripts. FSU transcripts or official transcripts already on file will be obtained by the Office of Admissions. Applications should be submitted for consideration one semester prior to the desired term of enrollment. Consult the "University Calendar" chapter of this *Graduate Bulletin* for specific application deadlines. The University reserves the right to close the application process earlier than the published deadlines if warranted by enrollment limitations.

A non-degree student at Florida State University who subsequently decides to seek reclassification from non-degree status to regular degree-seeking status must apply for graduate admission through the Office of Admissions. Enrollment as a non-degree student does not guarantee admission to a graduate program.

Work taken as a non-degree student does not automatically carry graduate degree credit; however, if the work is taken within the time limits prescribed by the degree program and approved by the department chair and dean, up to twelve hours of graduate-level credit with a grade of "B" or better in each course may count toward the degree, provided the student qualifies for admission to a graduate degree program.

The University generally does not issue I-20 or DS-2019 visa documents for international non-degree students; however, international students on H-1, H-4, or J-2 visas can apply. In addition, foreign nationals on F-1 or F-2 visas can apply if they have graduated and are doing Optional Practical Training (OPT). Research scholars on J-1 can also apply. The academic program must contact the Center for Global Engagement (<http://cge.fsu.edu>), and the student must provide evidence of financial support and other information required by the United States government. In addition, the student must comply with all health requirements, including submitting a health history form and purchasing or providing proof of health insurance coverage prior to enrollment.

For more details, see the "Academic Regulations and Procedures" chapter of this *Graduate Bulletin*.

Transient Graduate Students

A graduate student seeking a degree from a university *other than* Florida State University may register for coursework at the graduate level as a non-degree transient student at Florida State University. Transient students must receive prior approval from their graduate deans at their home institution for any courses taken at Florida State University for transfer to their home institutions. The transient application, with approved signatures, must be submitted to the Office of Admissions. Transient applications can be found at <http://admissions.fsu.edu>.

Florida Agricultural and Mechanical University-Florida State University Interinstitutional Registration

A Florida Agricultural and Mechanical University (FAMU) student planning to participate in the Cooperative Program at Florida State University must obtain specific approval from the designated representative in the Office of the Registrar at FAMU. Approval is also required from the department offering the course at FSU. The completed co-op application must be returned to the Office of the Registrar at FAMU by the published deadline. (Consult the "University Calendar" chapter of this *Graduate Bulletin* for specific application deadlines.) If approval to co-op is granted, the student will be registered for courses at Florida State University by a representative in the Office of the University Registrar at FSU. Some courses may have limited availability, and registration for these courses may be denied or delayed until drop/add at the beginning of the term. The approval of one institution does not bind the other to comply. All tuition and fees are paid at FAMU unless the course has additional departmental fees associated with it. Any departmental fees will be paid at FSU. Florida State University students planning to co-op at FAMU should refer to the "Academic Regulations and Procedures" chapter of this *Graduate Bulletin*.

Traveling Scholar Program

The University participates in the Interinstitutional Academic Collaborative Traveling Scholar Program that enables a graduate student to take advantage of special resources available on another Atlantic Coast Conference campus but not available at the home campus, such as special course offerings, research opportunities, unique laboratories, and library collections.

A traveling scholar's graduate advisor will approach an appropriate faculty member at the proposed host institution and recommend the scholar for a visiting arrangement. After agreement by the student's advisor and the faculty member of the host institution, graduate deans of both institutions will be fully informed by the advisor and have the power to approve or disapprove. A student will register at the host institution and will pay tuition and/or registration fees according to fee schedules established by that institution. Credit for the work taken will be recorded at the home university.

Each university retains its full right to accept or reject a student who wishes to study under its auspices. A traveling scholar will normally be limited to one term on the campus of the host institution. A traveling scholar accepted by the host institution will be regarded as being registered at that institution for the period.

A traveling scholar is not entitled to displacement allowance, mileage, or per diem payments. The home university, however, may elect to continue the financial support of the traveling scholar in the form of a fellowship or graduate assistantship with any work obligation to be discharged either at the home or host institution.

Academic Common Market

The Academic Common Market (ACM) is an interstate agreement among southern states for sharing academic programs. Participating states approve their residents who qualify for admission to enroll in specific graduate programs in other states on an in-state tuition basis. Arrangements traditionally are limited to unusual programs or programs not offered within the state of residence. To enroll as an ACM student, an applicant must obtain certification from the State Coordinator in the student's home state. Students must be admitted to the appropriate degree program by the Office of Admissions, and the letter of certification must be received in the Office of Admissions before the first day of classes for the effective term. Information on the state's authorization of programs or the identity of the coordinator for a particular state may be found at <http://home.sreb.org/acm/choosestate.aspx>. For information on the programs in which FSU participates, contact the Academic Common Market Coordinator, 115 Westcott, (850) 644-7497.

Cooperative Programs in the State of Florida, Division of Colleges and Universities

Cooperative graduate degree programs may be established in which the faculties of two or more of the universities within the state of Florida, Division of Colleges and Universities system join in offering a degree program in a particular discipline. The degree is given by the university authorized by the State Board of Education to offer it, but coursework and faculty participation within agreed upon limits can occur on the campus of either or all of the participating universities. For information on possibilities in a particular discipline, students should contact the academic department.

International Applicants

Notice of Admission

Formal notification of admission to Florida State University comes from the Office of Admissions and is for a **specific** term. The Center for Global Engagement will process the appropriate immigration form (Form I-20 or DS-2019) necessary to obtain the student's visa when formal admission is granted and all required financial documentation is received.

If the student is unable to enroll for the term indicated on the Application Status Check, the Office of Admissions should be informed immediately. If the student wishes to be reconsidered for a different term, the student must submit a new application and application fee.

Certification of Finances

The Certification of Financial Responsibility (CFR) must be completed before the Certificate of Eligibility (Form I-20 or DS-2019) is issued. The I-20 and DS-2019 are immigration forms presented to the United States Embassy/Consulate in order to obtain a U.S. Student Visa. The University is required by immigration authorities to verify the financial resources of each applicant prior to issuing the Form I-20 or DS-2019; therefore, it is important that the applicant knows the costs of attending the University and has the necessary support funds. More information on the CFR is available at <http://cge.fsu.edu>.

Finances

Before a United States Consul will grant a visa, international applicants must prove that they will have sufficient funding to meet all of their expenses while studying in the United States. Applicants must explain the source of funds noted on their I-20 or DS-2019 form and guarantee that they will receive funding for the duration of the program.

If the student's government limits the amount of money that can be sent to students in the United States, the applicant should make sure that sufficient funds will be available to cover all costs while at the University. When applicants leave their country, they must have enough money to pay for travel expenses to the University, fees for the entire term, living expenses until more money arrives, and the return fare to their home country. If the applicant's government requires verification of enrollment before money can be forwarded, the student may request verification from the Office of the University Registrar after registration is completed at the University.

On-campus employment opportunities are limited, and most international students are not permitted to work off campus except under special circumstances. Students should have access to approximately half of the estimated total yearly amount at the beginning of each semester, since University fees must be paid upon registration at the start of each term. Students should also be prepared for initial expenses such as housing deposits, insurance, utilities, etc. The most up-to-date cost estimates for international students can be found at <https://cge.fsu.edu/international-students/new-students>. These estimates are for unmarried students with no dependents. Additional funds must be included for a spouse and/or family.

Passports and Visas

International applicants need a current passport from their own government and a visa from the United States Embassy/Consulate to enter the United States. Applicants should apply for a passport as soon as possible, although in some countries it will be necessary to provide proof of admission to a school in the U.S. before a passport is granted.

Students already in possession of a passport must make sure it will remain valid for six months from the date they plan to enter the United States. It would also be prudent for students to check with the Embassy or Consulate of their native country to find out how passports are renewed while in the U.S. In some cases, students may need to get an extension of validity from their home country.

If students are coming to the University specifically for the purpose of studying, they need to apply for a Student Visa (F-1 or J-1). It is granted upon presentation of a Certificate of Eligibility (Form I-20 for the F-1 visa and Form DS-2019 for the J-1 visa which is typically granted to government-funded students) and proof that sufficient financial support to cover all expenses for the entire period of study in the U.S. is available. Graduate students holding F-1 or J-1 visas are normally required to carry from nine to twelve semester hours each semester, depending on the requirements of their department and the terms of any teaching or research assistantship.

Health Insurance Requirement

University Health Services provides outpatient care. Because students are likely to incur costs for medical care beyond that provided through outpatient services, adequate health insurance coverage must be obtained before they will be permitted to register for classes or to continue enrollment. In addition, international students with "J" visa status who will be accompanied by dependents are required by federal regulations to purchase health insurance coverage for them. For more information regarding the health insurance requirement, refer to <http://uhs.fsu.edu>.

International applicants are **required** to complete and submit a health history form that describes previous illnesses and/or surgery. If students have had tuberculosis (or scars appearing on chest X-rays) or other serious infectious diseases, they must have a thorough medical examination before coming to the University and must bring these reports to campus. International applicants must be immunized according to state of Florida requirements, and must show proof of such immunization prior to registration. Students will not be allowed to enroll until they have submitted the health history form and have purchased insurance or provided proof of health insurance that meets the minimum coverage required by the state of Florida.

Center for Intensive English Studies

English is the language of instruction and communication at the University. International applicants who lack sufficient English language preparation must correct this deficiency before being admitted to the University. Students may do this in their home country or in the United States at a school that offers an

intensive English language program. Florida State University offers such a program through the Frederick L. Jenks Center for Intensive English Studies. Detailed information on the Center may be obtained at <http://cies.fsu.edu>.

Successful completion of English Studies at the Frederick L. Jenks Center for Intensive English Studies does not guarantee admission to Florida State University.

Center for Global Engagement

The Center for Global Engagement (CGE) provides immigration advising and support services to international students. Upon arrival at Florida State University, international students must immediately check in with the CGE. An orientation for new international students is required. In addition to the International Student Orientation, the Graduate School and most departments hold orientation sessions for new graduate students the week before classes start. Incoming international students are **not** allowed to register until they arrive in Tallahassee, report to the CGE, attend the International Student Orientation, obtain health insurance coverage, and submit their medical health history form to University Health Services.

Federal reporting requirements make it essential for international students to enroll in a full course of study. For information about regulations that govern both F and J visas, international students should refer to <http://cge.fsu.edu>.

Admission to the Panama City Campus

Graduate students interested in attending the Panama City campus may request information from the *Panama City Office of Admissions and Records, Florida State University, 4750 Collegiate Drive, Panama City, FL 32405-1099*, or online at <https://pc.fsu.edu/academics/graduate-programs>.

The same policies, procedures, and requirements that pertain to the Tallahassee campus apply to the Panama City campus.

Deadlines for applications and supporting documents at the FSU Panama City campus are the same as the Tallahassee campus. Further information is available by calling the Panama City Office of Admissions and Records at (850) 770-2160 or by visiting their Web site at <http://pc.fsu.edu>.

Admission to the College of Law

For information regarding the College of Law and for receipt of a complete application packet, interested students should contact: *Florida State University, College of Law Admissions, P.O. Box 3061601, Tallahassee, FL 32306-1601* or visit <http://law.fsu.edu>.

Admission to the College of Medicine

Primary application for admission to the College of Medicine should be made to the American Medical College Application Service (AMCAS). For information regarding the secondary application and admission to the College of Medicine, interested students should contact: *Florida State University, College of Medicine Admissions, P.O. Box 3064300, Tallahassee, FL 32306-4300* or visit <http://med.fsu.edu>.

GRADUATE ORIENTATION AND INFORMATION SESSIONS

The Graduate School hosts a **New Graduate Student Orientation** on the Tuesday before classes begin each Fall semester. The goals of Orientation are to provide students with an understanding of what to expect academically and financially as graduate students, describe the professional ethics associated with graduate research and creative endeavors, highlight award-winning faculty and graduate students, and showcase campus services and extracurricular opportunities for graduate students. Graduate students attending this campus-wide Orientation can interact with representatives of graduate student organizations and campus offices, attend professional development workshops, and enjoy refreshments provided by Seminole Dining and the Congress of Graduate Students. In addition to the information and networking opportunities afforded by the Fall Orientation event, professional development workshops are offered collaboratively by the FSU Graduate School, Center for Leadership and Social Change, Center for Global Engagement, the University Libraries, and the Career Center throughout the academic year.

The Program for Instructional Excellence (PIE), a unit of the Graduate School, offers a two-day TA Orientation/PIE Teaching Conference which orients graduate student teaching assistants (TAs) to teaching at FSU. The **PIE Graduate Student Teaching Conference** is held the week before classes begin each Fall semester. Additional orientations/workshops may be offered by the individual departments that prepare graduate students for teaching in their discipline. Students will be notified through their individual academic departments of the date, time, and location of the University-wide orientation on teaching at FSU.

Departments often offer their own formal or informal orientation sessions; queries regarding these meetings should be made directly to the chair of the student's department.

Center for Global Engagement – International Student Orientation

The Center for Global Engagement (CGE), under the Division of Student Affairs, is the department assigned by the University and designated by the federal government to provide services to international students in F-1 and J-1 visa classifications. The CGE provides orientation sessions at the beginning of each semester for new international students in F-1 or J-1 visa status. At International Student Orientation, students are provided information to help them maintain their student visa status and get acquainted with on-campus and community resources and services. In addition, the CGE provides a variety of social and cultural programs such as International Coffee Hour, Global Café, Engage Your World Intercultural Dialogue Series, and other intercultural programs to promote interaction and increase cultural understanding among all FSU students.

Note that this CGE orientation is in addition to the orientation sessions offered by the student's academic graduate department and by the Graduate School.

The Center for Global Engagement is located in the Global and Multicultural Engagement building (The Globe) at 110 S. Woodward Avenue, Tallahassee, FL 32306-4216. The CGE's International Student and Scholar Services office, located on the second floor of the building, is open from 8:00 a.m. to 5:00 p.m., Monday through Friday, except on U.S. holidays and the University winter break. For more information, visit <http://cge.fsu.edu>, call (850) 644-1702, or e-mail CGE-NewStudents@fsu.edu.

Professional Development

Professional development, improving and increasing one's skill sets, is important at every stage of graduate education and beyond. For example, improving one's oral and written communication skills and developing an understanding of research and creative ethical behavior are types of professional development. At FSU, numerous professional development opportunities are offered by academic departments/programs, the Center for Global Engagement, the Center for Leadership & Social Change, the Career Center, and the Graduate School. One professional development program administered by the Graduate School is Preparing Future Faculty (PFF), which provides a range of faculty experiences for graduate students, (e.g., presentations by faculty at FSU).

Another approach to professional development is the series of workshops offered during the academic year for FSU graduate and postdoctoral students. Working closely with outstanding research faculty, administrators, and the Career Center, the Graduate School offers a wide range of workshops designed

to equip students to achieve their educational and career goals. Descriptions of professional development workshops are located at <https://gradschool.fsu.edu/professional-development/professional-development-workshops>.

Preparing Future Faculty (PFF) Program

The Preparing Future Faculty (PFF) program assists doctoral and terminal master's students in getting ready for faculty work. Through participation in coursework, workshops, mentoring, and interviewing faculty from other institutions, PFF candidates increase awareness of expectations for faculty performance and of resources available to aid in scholarly careers, and build their readiness to address teaching, research, and related demands of faculty life.

PFF program activities and requirements are organized around the keystones of: Teaching Preparation, Research Preparation, Career Development, Mentoring, and Portfolio Development. To earn the PFF Certificate, students or postdoctoral scholars must complete a minimum of twelve graduate hours in the areas of Teaching Preparation, Research Preparation, and Career Development. Events are either discipline-specific or campus wide. All FSU doctoral students are eligible to participate, as are FSU post-doctoral fellows, adjunct/visiting faculty, and graduate students in terminal master's degree programs (e.g., MFA). Candidates who meet specified requirements, often involving participation over a two-year period, are awarded a completion certificate, but PFF events are open to all graduate students/postdoctoral scholars/visiting faculty regardless of whether they intend to earn a graduate certificate.

FSU's PFF program coordinates with the national Preparing Future Faculty initiative of the Council of Graduate Schools and the Association of American Colleges and Universities, involving forty-five doctoral degree-granting institutions and more than 300 partner institutions.

To learn more about FSU's PFF program, check with your academic department, visit <https://gradschool.fsu.edu/professional-development/preparing-future-faculty-pff> or call The Graduate School at (850) 644-3501.

Preparing Future Professionals (PFP) Program

The Preparing Future Professionals (PFP) program assists graduate students in preparing for work outside of academia (e.g., government, non-profits, industry). The PFP program provides opportunities for PFP candidates to improve their readiness for the work-force, whether in the United States or internationally. PFP program requirements and activities are organized around the keystones of Content (skills in the discipline), Ethics/Scholarly Integrity, Professional Preparation (transferable skills), and Portfolio. To earn the PFP Certificate, students must complete a minimum of twelve graduate hours in the areas of Content, Ethics/Scholarly Integrity, and Professional Preparation. In addition to the coursework requirement, PFP candidates will attend professional development workshops, complete an internship/practicum or interviews in the field, and develop a résumé and a portfolio. All FSU graduate students and postdoctoral scholars are eligible to participate. Candidates who meet specified requirements by the time of graduation are awarded a graduate certificate, but PFP events are open to graduate students and postdoctoral scholars regardless of whether they intend to earn a graduate certificate.

To learn more about the PFP program, check with your academic department, visit <http://www.gradschool.fsu.edu/professional-development/preparing-future-professionals-pfp>, or call The Graduate School at (850) 644-3501.

Graduate Teaching Assistant Support

The Graduate School

Two programs that support graduate student teaching include the Program for Instructional Excellence (PIE) and Preparing Future Faculty (PFF). See the "Preparing Future Faculty Program" entry above.

University-Wide Teaching Conference

The **Program for Instructional Excellence (PIE)**, a unit of The Graduate School, provides a variety of resources and programs in support of the teaching and learning development of graduate student teaching assistants (TAs). The week before each Fall semester begins, PIE offers a two-day TA Orientation/PIE Teaching Conference to orient TAs to teaching at FSU. TAs learn strategies, methods, and tools for teaching; understand the role of the TA as a student, instructor, and apprentice; and learn about University policy issues such as academic integrity and Family Educational Rights and Privacy Act (FERPA). The conference satisfies the required training elements as stated in the University-wide policy on teaching standards for TAs. PIE offers an orientation during the first week of the Spring semester to accommodate

new students. The PIE Program also offers online and face-to-face workshops during the Fall, Spring, and Summer semesters. For more details about the conference and other programs offered by PIE, contact the Graduate School at (850) 645-7318, or visit the PIE Web site at <http://pie.fsu.edu/>.

Office of Graduate Fellowships and Awards

The **Office of Graduate Fellowships and Awards (OGFA)**, a unit of The Graduate School, assists current graduate students with articulating their interests and ambitions in support of identifying and applying for external fellowships and awards. Through participation in face-to-face individual and group meetings, workshops, and ongoing mentoring and advising, graduate students engage in the fellowship application process as an integral part of their professional development. OGFA's professional development opportunities support early career development, academic portfolio building, and ongoing development of writing and communication skills. The Office of Graduate Fellowships and Awards offers online and face-to-face workshops during the Fall, Spring, and Summer semesters. All workshops qualify for PFF and PFP credit.

To learn more about the Office of Graduate Fellowships and Awards, visit <http://ogfa.fsu.edu> or call (850) 645-0850.

Office of Distance Learning

The **Office of Distance Learning (ODL)** provides information on preparing to teach at FSU, including instructional strategies, best practices, and a comprehensive checklist of resources for both first-time and experienced instructors. In accordance with The Graduate School's professional development efforts, ODL offers training sessions each semester on instructional technology and teaching strategies for the online environment. Visit the ODL Web site at <https://odl.fsu.edu> for training opportunities, online pedagogical techniques, instructional technologies, and quality course design strategies.

Canvas serves as the learning management system for the FSU community at <https://canvas.fsu.edu>. For access to Canvas, visit <https://my.fsu.edu> to activate your FSUID. Visit the Canvas Support Center at <https://support.canvas.fsu.edu> for answers to frequently asked questions, news, and resources. For technical assistance, call ODL Technical Support at (850) 644-8004 or e-mail canvas@fsu.edu.

The **FSU Testing Center** provides secure, on-site proctored testing for a variety of FSU and non-FSU examinations. Mark-sense form scanning services are offered, including online form viewing, item analysis, and reports. The Assessment and Testing unit facilitates remote proctoring for FSU's distance learning students and administers FSU course evaluations on behalf of the university. For more information, visit <https://odl.fsu.edu/assessment-testing> or contact Assessment and Testing at (850) 644-3017 or testing@campus.fsu.edu.

GRADUATE ACADEMIC INTEGRITY AND GRIEVANCES

A Summons to Responsible Freedom

Values and Moral Standards at Florida State University

The moral norm that guides conduct and informs policy at Florida State University is responsible freedom. Freedom is an important experience that the University, one of the freest of institutions, provides for all of its citizens: faculty, students, administrators, and staff. Freedom is responsibly exercised when it is directed by ethical standards.

As the Florida public university most deeply rooted in the liberal arts tradition, Florida State University not only focuses on intellectual development, but as a community engaged in moral discourse, it also recognizes the need for the development of the whole person. The University maintains a comprehensive educational program ranging from classroom instruction to research and creative activities at the frontiers of human knowledge. These modes of searching for the truth are mutually enhancing and provide the context for the liberating experiences students gain from contact with ideas and individuals. Education based in the liberal arts provides an opportunity for students to learn to express themselves; to think critically both quantitatively and qualitatively; to gain an understanding of and respect for self and others; to understand the world by knowing more about its history, the role of science and technology, and social and cultural achievements; and to develop specialized talents for a vocation. This opportunity is provided with the conviction, as reflected in the University seal, that through such an educational experience one can come to a clearer understanding of the complex moral issues inherent in human life and can develop the knowledge and skills for effective and responsible participation in the world.

Florida State University shares a commitment to the dignity and worth of each person and is guided in its many endeavors by that underlying value. Through academic activity, community involvement, social interaction, cultural experience, recreational and physical activity, and religious involvement, students find many avenues in the University community for the development of the whole person.

The University shares this society's commitment to the rule of law and expects members of the community to abide by the laws of the city, state, and nation, as well as University rules and regulations.

The University aspires to excellence in its core activities of teaching, learning, research, creative expression, and public service and is committed to the integrity of the academic process. The Academic Honor Code is a specific manifestation of this commitment. Truthfulness in one's claims and representations and honesty in one's activities are essential in life and vocation, and the realization of truthfulness and honesty is an intrinsic part of the educational process.

The University is a place of both assent and dissent and is committed to academic freedom and civil dialogue. In a free and vigorous academic community an ongoing clash of ideas is to be expected and encouraged. The University has a special obligation to see that all have an opportunity to be heard.

Florida State University is committed to nondiscrimination in matters of race, creed, color, sex, religion, national origin, age, disability, veterans' or marital status, sexual orientation, gender identity, gender expression, or any other protected group status. This commitment applies in all areas with students, faculty, and other University personnel. It addresses recruiting, hiring, training, promotions, and applicable employment conditions. It is also relevant to those aspects of the University concerned with the choice of contractors, suppliers of goods and services, and with the use of University facilities. The University believes in equal opportunity practices that conform to both the spirit and the letter of all laws against discrimination.

A responsible student recognizes that freedom means the acknowledgement of responsibility to the following: to justice and public order; to fellow students' rights and interests; to the University, its rules, regulations, and accepted traditions; to parents, teachers, and all others whose support makes one's advanced education possible; to city, state, and national laws; to oneself; and to the opportunity for specialized training and continuing education toward the ends of personal fulfillment and social service. Students are urged to use their freedom in the University community to develop habits of responsibility that lead to the achievement of these personal and social values. Responsible student behavior requires observance of the Student Conduct Code, which is based on respect for the dignity and worth of each person and the requirements for successful community life.

Relations among all persons should be characterized by mutual respect and equality. The University denounces all forms of sexism and racism. Sex

discrimination, sexual harassment, and sexual coercion of any sort are wrong and constitute a violation of fundamental moral requirements and state and federal law. Minimally responsible behavior requires that no one take sexual advantage of another.

The cultural, ethnic, and racial diversity of the University community provides an opportunity for learning about those different from oneself. The University believes that each individual deserves to be treated with dignity and respect and accorded the full opportunities of the University, without regard to prejudicial assumptions or attitudes. Discrimination based on race or ethnicity resulting from acts or policies is illegal and incompatible with the concept of responsible freedom as espoused by Florida State University.

The University enforces all laws relevant to alcohol and controlled substances and further strongly discourages the use of illegal substances at any time. The University disseminates and encourages the dissemination by others of information concerning the responsible use of alcohol.

The University is a compassionate community. In its treatment of students, it recognizes the wisdom both of letting students experience the consequences of their actions and of providing the opportunity to learn and grow in ways that can overcome past difficulties. The University provides ongoing student support through the health center, counseling services, and the academic advising process.

The university experience is a time for adventure, fun, excitement, the making of new friends, and the discovery of new possibilities. There are numerous individual and organized opportunities for students to develop and to learn in the course of their university years to exercise newly acquired freedom deliberately and responsibly.

Matriculation to Florida State University, then, is a summons to the exercise of responsible freedom in a community of teaching, learning, and discovery.

Integrity in Research and Creative Activity

It is the policy of Florida State University to uphold the highest standards of integrity in research and creative activity, and to protect the right of its employees to engage in research and creative activity. Detailed policies and procedures can be found in the *Faculty Handbook* under "Section 6: Policies and Procedures."

Academic Honor Policy

Introduction

The statement on 'Values and Moral Standards at FSU' says: "The moral norm which guides conduct and informs policy at Florida State University is responsible freedom. Freedom is an important experience which the University, one of the freest of institutions, provides for all of its citizens – faculty, students, administrators, and staff. Freedom is responsibly exercised when it is directed by ethical standards." (See above 'Values and Moral Standards at FSU' section of this chapter.)

The statement also addresses academic integrity: "The University aspires to excellence in its core activities of teaching, research, creative expression, and public service and is committed to the integrity of the academic process. The [Academic Honor Policy] is a specific manifestation of this commitment. Truthfulness in one's claims and representations and honesty in one's activities are essential in life and vocation, and the realization of truthfulness and honesty is an intrinsic part of the educational process." (See above 'Values and Moral Standards at FSU' section of this chapter.)

Guided by these principles, this Academic Honor Policy outlines the University's expectations for students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty throughout the process. The Academic Honor Policy Committee may take direct jurisdiction of a case under extraordinary circumstances when it is determined by a majority vote of the committee that taking direct jurisdiction is appropriate.

Students in the College of Law and the College of Medicine are governed by the academic integrity policies and procedures of their respective colleges, which are subject to approval by the Academic Honor Policy Committee.

Panama City students who have questions about the academic honor policy can contact the Dean's Office in the Holley Building for assistance.

FSU Academic Honor Pledge

I affirm my commitment to the concept of responsible freedom. I will be honest and truthful and will strive for personal and institutional integrity at Florida State University. I will abide by the Academic Honor Policy at all times.

Academic Honor Violations

Note: Instructors are responsible for reinforcing the importance of the Academic Honor Policy in their courses and for clarifying their expectations regarding collaboration and multiple submissions of academic work. Examples have been provided for the purpose of illustration and are not intended to be all-inclusive.

1. **Plagiarism.** Presenting the work of another as one's own (i.e., without proper acknowledgement of the source). Typical examples include: Using another's work from print, web, or other sources without acknowledging the source; quoting from a source without citation; using facts, figures, graphs, charts or information without acknowledgement of the source; or utilizing ghostwriting or pay-for-paper services.
2. **Cheating.** Improper access to or use of any information or material that is not specifically condoned by the instructor for use in the academic exercise. Typical examples include: Copying from another student's paper or receiving unauthorized assistance during a quiz, test, or examination; using books, notes, or other devices (e.g., calculators, cell phones, or computers) when these are not authorized; procuring without authorization a copy of or information about an examination before the scheduled exercise; or unauthorized collaboration on exams.
3. **Unauthorized Group Work.** Unauthorized collaborating with others. Typical examples include: Working with another person or persons on any activity that is intended to be individual work, where such collaboration has not been specifically authorized by the instructor.
4. **Fabrication, Falsification, and Misrepresentation.** Unauthorized altering or inventing of any information or citation that is used in assessing academic work. Typical examples include: Inventing or counterfeiting data or information; falsely citing the source of information; altering the record of or reporting false information about practicum or clinical experiences; altering grade reports or other academic records; submitting a false excuse for absence or tardiness in a scheduled academic exercise; or lying to an instructor to increase a grade.
5. **Multiple Submissions.** Submitting the same academic work (including oral presentations) for credit more than once without instructor permission. It is each instructor's responsibility to make expectations regarding incorporation of existing academic work into new assignments clear to the student in writing by the time assignments are given. Typical examples include: Submitting the same paper for credit in two courses without instructor permission; or making minor revisions in a credited paper or report (including oral presentations) and submitting it again as if it were new work.
6. **Abuse of Academic Materials.** Intentionally damaging, destroying, stealing, or making inaccessible library or other academic resource material. Typical examples include: Stealing or destroying library or reference materials needed for common academic purposes; hiding resource materials so others may not use them; destroying computer programs or files needed in academic work; stealing, altering, or intentionally damaging another student's notes or laboratory experiments. This refers only to abuse as related to an academic issue.
7. **Complicity in Academic Dishonesty.** Intentionally helping another to commit an act of academic dishonesty. Typical examples include: Knowingly allowing another to copy from one's paper during an examination or test; distributing test questions or substantive information about the material to be tested before a scheduled exercise; or deliberately furnishing false information.
8. **Attempting to commit any offense as outlined above.**

Student Rights

Students have the following important due process rights, which may have an impact on the appellate process:

- to be informed of all alleged violation(s), receive the complaint in writing (except in a Step 1 agreement, described in the Procedures Section, where the signed agreement serves as notice), and be given access to all relevant materials pertaining to the case.
 - to receive an impartial hearing in a timely manner where they will be given a full opportunity to present information pertaining to the case.
- Students are also accorded the following prerogatives:

- when possible, to discuss the allegations with the instructor.
- privacy, confidentiality, and personal security.
- to be assisted by an advisor who may accompany the student throughout the process but may not speak on the student's behalf.
- to choose not to answer any question that might be incriminating.
- to contest the sanctions of a first-level agreement and to appeal both the decision and sanctions of an Academic Honor Hearing.

The student has the right to continue in the course in question during the entire process. Once a student has received notice that he/she is being charged with an alleged violation of the Academic Honor Policy, or when a student has been found responsible for an Academic Honor Policy violation, the student is not permitted to withdraw or drop the course. Should no final determination be made before the end of the term, the grade of "Incomplete" will be assigned until a decision is made.

Students in Tallahassee should contact the Dean of Students Department for further information regarding their rights. Students based in Panama City should contact the Student Affairs office in the Barron Building or the Dean's Office in the Holley Building.

Procedures for Resolving Cases

Step 1.

Throughout the Step 1 process, the instructor has the responsibility to address academic honor allegations in a timely manner, and the student has the responsibility to respond to those allegations in a timely manner. For assistance with the Academic Honor Policy, students should consult the Dean of Students Department and instructors should consult the Office of the Vice President for Faculty Development and Advancement. Panama City students and instructors should contact the Dean's Office in the Holley Building for assistance.

If a student observes a violation of the Academic Honor Policy, he or she should report the incident to the instructor of the course. When an instructor believes that a student has violated the Academic Honor Policy in one of the instructor's classes, the instructor must first contact the Office of Vice President for Faculty Development and Advancement to discover whether the student has a prior record of academic dishonesty in order to determine whether to proceed with a Step 1 agreement (for Panama City-based instructors, the Dean's office in Panama City campus will also assist). The instructor must also inform the department chair or dean. (Teaching assistants must seek guidance from their supervising faculty member and adjunct instructors must seek guidance from their department chair.) However, faculty members or others who do not have administrative authority for enforcing the Academic Honor Policy should not be informed of the allegation, unless they have established a legitimate need to know. If pursuing a Step 1 agreement is determined to be possible, the instructor shall discuss the evidence of academic dishonesty with the student and explore the possibility of a Step 1 agreement (refer to <http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy>). Four possible outcomes of this discussion may occur:

1. If the charge appears unsubstantiated, the instructor will drop the charge, and no record of academic dishonesty will be created. The instructor should make this decision using the "preponderance of the evidence" standard.
2. The student may accept responsibility for the violation and accept the academic sanction proposed by the instructor. In this case, any agreement involving an academic penalty must be put in writing and signed by both parties on the "Academic Honor Policy Step 1 Agreement" form (refer to <http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy>) which must then be sent to the Office of Faculty Development and Advancement. This agreement becomes a confidential student record of academic dishonesty and will be removed from the student's file five years from the date of the final decision in the case. Any grade imposed as the result of an academic sanction will remain on the student's transcript indefinitely and will not be subject to course drop or withdrawal.
3. The student may accept the responsibility for the violation but contest the proposed academic sanction. In this circumstance, the student must submit the "Academic Honor Policy Referral to Contest Sanction" form (refer to <http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy>) along with supporting documentation to the Office of the Vice President for Faculty Development and Advancement. The student's written statement must demonstrate specific reasons why the proposed sanction is extraordinarily disproportionate to the offense committed for any change to occur in the sanction. The Vice President for Faculty Development and Advancement (or designee) will review the submitted

documentation to determine whether the proposed sanction should be imposed. The Vice President (or designee) may affirm or modify the sanction as appropriate. The decision that results from this review is final.

- The student may deny responsibility. In this circumstance, the instructor submits the “*Academic Honor Policy Hearing Referral*” form (refer to <http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy>) along with supporting documentation to the Office of the Vice President for Faculty Development and Advancement for an Academic Honor Policy Hearing. The student is issued a letter detailing the charges within ten class days of the receipt of the referral, and the schedule for the hearing will be set as soon as possible and within ninety days from the date of the letter. These timelines may be modified in unusual circumstances. Unless all parties agree, the hearing will not be held any sooner than seven class days from the student’s receipt of the charge letter. The process then proceeds to Step 2.

If the student is found to have a prior record of academic dishonesty or the serious nature of the allegations merits a formal hearing, the instructor must refer the matter to Step 2 for an Academic Honor Policy Hearing by submitting the “*Academic Honor Policy Hearing Referral*” form (refer to <http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy>) and appropriate documentation to the Vice President for Faculty Development and Advancement.

Allegations of academic dishonesty involving a graduate student engaged in any phase of the preliminary or comprehensive examination, thesis, or dissertation will be treated as egregious and will be resolved through the Step 2 process, in which the major professor will serve as the “instructor” under the hearing procedures. The Vice President for Faculty Development and Advancement and the student’s academic dean, (as well as the Vice President for Research in cases involving grant-funded research), should be informed as soon as possible of all such allegations. The decision regarding whether to submit a hearing referral will be made by a committee consisting of the department chair and two faculty members appointed by the academic dean, one of whom should be the student’s committee member serving as the University representative (if one has been identified), excluding the major professor. In rendering its decision, this committee should review all available information and consult with the major professor and the academic dean.

Step 2.

Academic Honor Policy Hearing.

A panel consisting of five members shall hear the case. The panel shall include: one faculty member appointed by the dean from the unit in which the academic work is conducted; one faculty member appointed by the Vice President for Faculty Development and Advancement who is not from that unit; and two students appointed through procedures established by the Dean of Students Department. The panel shall be chaired by the Vice President for Faculty Development and Advancement (or designee), who votes only in case of a tie.

The hearing will be conducted in a non-adversarial manner with a clear focus on finding the facts within the academic context of the academic work. The student is presumed innocent going into the proceeding. After hearing all available and relevant information from the student and the instructor, the panel determines whether or not to find the student responsible for the alleged violation using the “preponderance of the evidence” standard. If the student is found responsible for the violation, the panel is informed about any prior record of academic honor policy violations and determines an academic sanction (and disciplinary sanction, if appropriate). In some cases, a Step 1 sanction may have been appropriately proposed prior to the convening of an Academic Honor Hearing. If the student is found responsible in these cases, the panel typically will impose a sanction no more severe than that which was proposed by the faculty member. The panel is required to provide a clear written justification for imposing a sanction more severe than the sanction proposed in Step 1.

The chair of the Academic Honor Policy hearing panel will report the decision to the student, the instructor, the academic unit, the supervising faculty member or a teaching assistant or an adjunct instructor, the student’s dean, the Dean of Students Department, and the Registrar, if appropriate. If the student is found responsible, this outcome will be recorded with the Dean of Students Department and becomes a confidential student record of an Academic Honor Policy violation. Records in which suspension or a less severe sanction (including all academic sanctions) is imposed will be removed five years from the date of the final decision in the case. Any grade imposed as the result of an academic sanction will remain on the student’s transcript indefinitely and will not be subject to course drop or withdrawal. Records involving dismissal

and expulsion will be retained permanently, except in cases where a dismissed student is readmitted. Those records will be removed five years from the date of the student’s readmission.

Sanctions

Step 1.

This Step 1 procedure is implemented with first-offense allegations that do not involve egregious violations. The decision regarding whether an allegation is egregious is made by the Vice President for Faculty Development and Advancement (or designee) and the instructor. The instructor should consider the seriousness of the violation, the student’s circumstances, potential opportunities for learning and consistency with past sanction in determining a proposed sanction. The following sanctions are available in the Step 1 procedure.

- Additional academic work, including re-doing the assignment**
- A reduced grade (including “0” or “F”) for the assignment**
- A reduced grade (including “F”) for the course**

Step 2.

An Academic Honor Policy Hearing is held for all second offenses, for all first offenses that involve egregious violations of the Academic Honor Policy, for all offenses that involve simultaneous violations of the Student Conduct Code, and in all cases where the student denies responsibility for the alleged violation. The decision regarding whether an allegation is egregious is made by the Vice President for Faculty Development and Advancement (or designee) and the instructor. In some cases, a Step 1 sanction may have been appropriately proposed prior to the convening of an Academic Honor Policy Hearing. If the student is found responsible in these cases, the panel typically will impose a sanction no more severe than that which was proposed by the faculty member. The panel is required to provide a clear written justification for imposing a sanction more severe than the sanction proposed in Step 1. Students will not be penalized solely for exercising their right to request a Step 2 hearing. The following sanctions are available in Step 2 (see the Procedures section) and may be imposed singly or in combination:

- Additional academic work, including re-doing the assignment**
- A reduced grade (including “0” or “F”) for the assignment**
- A reduced grade (including “F”) for the course**
- Educational Activities** – attendance at educational programs, development of an academic plan with the assistance of the Academic Center for Excellence, participation in an Ethics Workshop, tutoring regarding proper citation practices, meetings with appropriate faculty or administrators, writing essays, or other educational activities. Fees may be charged to cover the cost of educational activities.
- Restitution, letter of apology, or other restorative act**
- Disciplinary Probation** – a period of time during which any further violation of the Academic Honor Policy puts the student’s status with the University in jeopardy. If the student is found responsible for another violation during the period of Disciplinary Probation, serious consideration will be given to imposing a sanction of Suspension, Dismissal, or Expulsion. Restrictions that may be placed on the student’s activities during this time period include, but are not limited to: participating in student activities; representing the University on athletic teams or in other leadership positions; and participating in practice for athletic or other competitions.
- Suspension** – Separation from the University for a specified period, not to exceed two years.
- Dismissal** – Separation from the University for an indefinite period of time. Dismissal is considered a final sanction, but readmission is possible in some cases under documented exceptional circumstances. No consideration will be given to readmitting a dismissed student within the first three years after a dismissal is imposed. Dismissal is noted on the student’s transcript.
- Expulsion** – Separation from the University without the possibility of readmission. Expulsion is noted on the student’s transcript.
- Withholding of diplomas, transcripts, or other records for a specified period of time.**
- Suspension of degree, in cases where an offense is discovered after the degree is posted.**
- Revocation of degree, in cases where an offense is discovered after the degree is posted.**

Appeals

Decisions of the Academic Honor Policy Hearing Panel may be appealed to the Academic Honor Policy Appeal Committee, a standing four-member

committee composed of two faculty appointed by the President and two students appointed by the Vice President for Student Affairs. The chair will be appointed annually by the President, and members will serve two-year renewable terms. In case of a tie vote regarding a case, the committee will submit a written report to the Provost, who will then make the final determination.

On appeal, the burden of proof shifts to the student to prove that an error has occurred. The only recognized grounds for appeal are:

1. Due process errors involving violations of a student's rights that substantially affected the outcome of the initial hearing.
2. Demonstrated prejudice against the charged student by any panel member. Such prejudice must be evidenced by a conflict of interest, bias, pressure, or influence that precluded a fair and impartial hearing.
3. New information that was not available at the time of the original hearing.
4. A sanction that is extraordinarily disproportionate to the offense committed.
5. The preponderance of the evidence presented at the hearing does not support a finding of responsible. Appeals based on this consideration will be limited to a review of the record of the initial hearing, and the student will not be invited to appear before the Appeal Committee.

The procedures followed during the appeals process are:

6. The student should file a written letter of appeal to the Office of the Vice President for Faculty Development and Advancement within ten class days after being notified of the Academic Honor Policy Hearing Panel decision. This letter should outline the grounds for the appeal (see 1–5 above) and should provide supporting facts and relevant documentation.
7. The Academic Honor Policy Appeal Committee will review this letter of appeal and will hear the student and any witnesses called by the student, except in appeals based on consideration #5 above. The committee may also gather any additional information it deems necessary to make a determination in the case. The instructor is not typically involved in the appellate process.
8. The Appeals Committee may affirm, modify, or reverse the initial panel decision, or it may order a new hearing to be held. This decision becomes final agency action when it is approved by the Provost. In cases where the student is found responsible, the decision becomes a confidential student record of academic dishonesty.
9. Appellate decisions are communicated in writing to the student, the instructor, the instructor's academic unit, the supervising faculty member or a teaching assistant or an adjunct instructor, the Office of the Vice President for Faculty Development and Advancement, the student's academic dean, the Dean of Students Department and the Registrar, if necessary, within thirty class days of the appellate hearing.

Academic Honor Policy Committee

An Academic Honor Policy Committee shall be appointed by the University President. The Committee will include: three faculty members, selected from a list of six names provided by the Faculty Senate Steering Committee and three students, selected from a list of six names provided by the Student Senate. The Vice President for Faculty Development and Advancement or designee and the Dean of Students or designee shall serve *ex officio*. Faculty members will serve three-year staggered terms, and students will serve one-year terms. The committee will meet at least once a semester. It will monitor the operation and effectiveness of the Academic Honor Policy, work with the Faculty Senate and the Student Senate to educate all members of the community regarding academic integrity, and make recommendations for changes to the policy.

Amendment Procedures

Amendments to the Academic Honor Policy may be initiated by the Academic Honor Policy Committee, the Faculty Senate, the Student Senate, and/or the Vice President for Academic Affairs. Amendments to the policy must be approved by both the Faculty Senate and the Student Senate.

Grievance Procedure

Students who allege that academic regulations and procedures have been improperly applied in specific instances may have their grievances addressed through the general academic appeals process. In this process, the student brings a complaint first to the instructor, then to the department chair, and finally to the academic dean appropriate to the course involved, stopping at the level at which the complaint is resolved. If no resolution is reached, the student brings the complaint to the attention of the Vice President for Faculty Development and Advancement for either resolution or referral to the Student Academic Relations Committee of the Faculty Senate. A graduate student whose complaint is unresolved must see the Dean of the Graduate

School prior to meeting with the Vice President for Faculty Development and Advancement. The Student Academic Relations Committee has the authority to direct, through the Vice President for Academic Affairs, that corrective action be taken when justified.

Grievance Procedure: Panama City Campus

Students who allege that academic regulations and procedures have been improperly applied in specific instances may have their grievances addressed through the general academic appeals process. In this process, the student brings a complaint first to the instructor, then to the Panama City Associate Dean (or department chair if applicable to the course), and then to the Panama City Dean (or College Dean if applicable to the course), stopping at the level at which the complaint is resolved. If no resolution is reached, the student brings the complaint to the attention of the Vice President for Faculty Development and Advancement for either resolution or referral to the Student Academic Relations Committee of the Faculty Senate. A graduate student whose complaint is unresolved must see the Dean of the Graduate School prior to meeting with the Vice President for Faculty Development and Advancement. The Student Academic Relations Committee has the authority to direct, through the Vice President for Academic Affairs, that corrective action be taken when justified.

Grievance Procedure: Panama, Republic of Panama Campus

Students who allege that academic regulations and procedures have been improperly applied in specific instances may have their grievances addressed through the general academic appeals process. In this process, the student brings a complaint first to the instructor, then to the FSU Panama Vice Rector for Academic Affairs. If the complaint is not resolved at this stage, then the Vice Rector for Academic Affairs forwards the complaint to the Academic Standards Committee, which then must make a recommendation to the FSU Panama Rector. If no resolution is reached at the Republic of Panama campus, then the student will go to the department chair, and finally to the academic dean appropriate to the course involved, stopping at the level at which the complaint is resolved. If no resolution is reached, the student brings the complaint to the attention of the Vice President for Faculty Development and Advancement for either resolution or referral to the Student Academic Relations Committee of the Faculty Senate. A graduate student whose complaint is unresolved must see the Dean of the Graduate School prior to meeting with the Vice President for Faculty Development and Advancement. The Student Academic Relations Committee has the authority to direct, through the Vice President for Academic Affairs, that corrective action be taken when justified.

Student Academic Relations Committee (SARC) of the Faculty Senate

The Faculty Senate Committee on Student Academic Relations hears appeals from students concerning decisions about their academic work which they have evidence to show to have been arrived at improperly or unprofessionally in departments, schools, or colleges. The committee comprises five faculty members (appointed annually by the Faculty Senate steering committee with the advice and consent of the Senate for staggered two-year terms) and two students, one undergraduate and one graduate (appointed annually by the University President). The committee elects its chair annually from the faculty representatives and reports its findings and recommendations to the Vice President for Academic Affairs. Students wishing to make appeals to the committee on student academic relations should consult the Office of Faculty Development and Advancement. Appeals to this committee are made after all other available remedies have been exhausted.

University Student Ombudsperson

The Office of the University Ombudsperson provides students of the University community an avenue for confidential exploration of decisions regarding academic issues. Once all other appropriate mechanisms have been exhausted, students may present their case to the University Ombudsperson. The ombudsperson is a neutral facilitator and will assist students with any academic problem or grievance that may arise during their interaction with the University. While he/she may be an instrument for change, the ombudsperson does not resolve issues by any direct use of authority or power, but rather requests a reexamination of the problem.

Grade Appeals System

The purpose of the grade appeals system is to afford an opportunity for an undergraduate or graduate student to appeal a final course grade under certain

circumstances. Faculty judgment of students' academic performance is inherent in the grading process and hence should not be overturned except when the student can show that the grade awarded represents a gross violation of the instructor's own specified evaluation (grading) statement and therefore was awarded in an arbitrary, capricious, or discriminatory manner. The evaluation (grading) statement utilized during the grade appeals process is the one contained in the instructor's syllabus at the beginning of the semester. This system does not apply to preliminary or comprehensive exams or to thesis or dissertation defenses; these issues are reviewed by the Student Academic Relations Committee via the Vice President for Faculty Development and Advancement.

Step 1. Within fifteen class days (defined throughout the Grade Appeals System as Mondays through Fridays during regular fall, spring, and summer semesters, as noted in the FSU Academic Calendar maintained by the University Registrar. Class days are not dependent on whether an individual student has class on a particular day) following the date that final grades are made available to students, the student must contact the instructor in question to discuss the grade and attempt to resolve any differences. The student should document any attempts to contact the instructor in order to establish that the appeal was begun within this fifteen-class-day period. In the event that the instructor is not available, the student should provide that documentation to the instructor's program or department chair. It is expected that the student will first attempt to resolve the grade dispute with the instructor; however, either the student or the instructor may consult with the appropriate department chair, school director, or designee during this process.

Step 2. If no resolution is reached within this fifteen-class-day period, after the student's documented attempt, the student has an additional ten class days to submit a written statement to the department chair, school director, or designee. This statement must include an account of attempts to resolve the issue, as well as the evidence that forms the basis for the appeal.

Within twenty class days thereafter, the department chair, school director, or designee will set a date for a meeting of a grade appeals screening committee composed of three students enrolled in the academic unit offering the course to review the appeal. These students should be either undergraduate or graduate students, depending on the enrollment status of the student challenging the grade. The meeting should occur within that twenty-class-day period, if practicable. Appropriate students who have no conflict of interest will be chosen to serve on this screening committee by a student organization associated with the program or department, if such an organization exists. If none exists or if members of such an organization are not available, the department chair, school director, or designee will select appropriate students who have no conflict of interest. Both the student and the instructor may attend the meeting, as may the department chair, school director, or designee.

The role of the screening committee is solely to determine whether the student has presented sufficient evidence to warrant further review. Within five calendar days after this meeting, the screening committee will render its decision in writing (recommend/do not recommend further review) to the department chair, school director, or designee, the student, and the instructor. A negative decision will end the appeal. A positive decision will trigger the next step in the process.

Step 3. Within fifteen class days of a positive decision from the grade appeals screening committee, the department chair, school director, or designee will appoint and arrange for a meeting of a grade appeals board. The meeting should occur within that fifteen-class-day period, if practicable. The board is composed of three faculty members and two students other than those who served on the screening committee. These students should be either undergraduate or graduate students, depending on the enrollment of the status of the student challenging the grade.

The purpose of this board is to determine whether or not to uphold the final grade assigned by the instructor. The board will consider only the evidence provided by the student and the instructor in making the determination. The student, the instructor, and the department chair, school director, or designee may attend the meeting.

The grade will be upheld unless the evidence shows that the grade was awarded in an arbitrary, capricious, or discriminatory manner, as a result of a gross violation of the instructor's own evaluation (grading) statement. If the original grade is not upheld, the board will recommend that an alternative grade be assigned by the department chair, school director, or designee.

If the student has evidence that this grade appeals process has deviated substantially from these established procedures, resulting in a biased decision, the student may consult with the Office of Faculty Development and Advancement regarding referral to the Faculty Senate Student Academic Relations Committee.

Note: For additional information regarding general grading practices and approvals, please refer to the 'Grading Practices' section in the "Academic Regulations" chapter of this *General Bulletin*.

Religious Holy Days

Per Section 1006.53, Florida Statutes, the Florida State University policy on observance of religious work-restricted holy days provides that students shall, upon notifying their instructor within the first two weeks of the semester, be excused from class to observe a religious work-restricted holy day of their faith. While students will be held responsible for the material covered in their absence, each student shall be permitted a reasonable amount of time to make up the work missed. Instructors and University administrators shall in no way arbitrarily penalize students who are absent from academic or social activities because of religious work-restricted holy day observance. Instructors will find the calendar developed by the University of Missouri (<https://diversity.missouri.edu/guide-to-religions/dates-practices-accomodations/>) a useful resource as they respond to student requests for absence. Students who allege that this policy has been improperly applied in specific instances may have their grievances addressed through the general academic appeals process. In this process, the student brings a complaint first to the instructor, then to the department chair, and finally to the academic dean appropriate to the course involved, stopping at the level at which the complaint is resolved. If no resolution is reached, the student brings the complaint to the attention of the Vice President for Faculty Development and Advancement for either resolution or referral to the Student Academic Relations Committee of the Faculty Senate. This committee has the authority to recommend to the Vice President for Academic Affairs that corrective action be taken when justified. Consult the 'Grievance Procedure' section of this chapter for a complete description.

Sexual Relationships and Conflicts of Interest

The following policy concerning conflicts of interest applies to graduate students who are being supervised or evaluated by faculty as well as graduate students who are serving as teaching assistants and thus supervising or evaluating undergraduates. Sexual relationships between faculty members and students where a direct supervisory or evaluative relationship exists are fraught with the potential for exploitation. The respect and trust accorded a faculty member by a student, as well as the power exercised by the faculty member in a direct supervisory or evaluative role, make voluntary consent by the student suspect. In their relationships with students, faculty members are expected to be aware of their professional responsibilities and to avoid conflict of interest, favoritism, or bias:

1. When any direct supervisory or evaluative role exists, a consensual sexual relationship between a student and a faculty member is a conflict of interest.
2. Any situation of direct supervision or evaluation will be ended immediately when a consensual sexual relationship between a student and a faculty member exists.
3. Any such relationship must be disclosed to the faculty member's supervisor immediately.
4. Direct supervision includes any type of evaluative role. Examples of direct supervision of the student include teaching the student's class, serving as a thesis or dissertation director, instructor of record, member of the student's thesis or dissertation committee, member of the student's comprehensive or doctoral exam committee, member of other committees where the focus is evaluation or supervision of the student's academic competence or the student's assistantship.

GRADUATE ACADEMIC REGULATIONS AND PROCEDURES

Required First Day Attendance Policy

University-wide policy requires all students to attend the first class meeting of all classes for which they are registered. Students who do not attend the first class meeting of a course for which they are registered will be dropped from the course by the academic department that offers the course. This policy applies to all levels of courses and to all campuses and study centers. **It remains the student's responsibility to verify course drops and check that fees are adjusted.** Please refer to 'Class Attendance' below for additional information. **Note:** Students who have received some or all of their financial aid prior to the end of drop/add for a term, may be subject to repayment of financial aid if there is a change in their financial aid eligibility. Examples of this may include, but are not limited to, reduction of course load below required levels, cancellation of schedule, failure to meet satisfactory academic progress requirements, and other conditions required to maintain financial aid eligibility.

Class Attendance

All students are expected to abide by the class attendance policy set forth by the instructor in each class in accordance with the *Faculty Handbook*. When possible, students also must provide advance notice of absences, as well as relevant documentation regarding absences, to the instructor as soon as possible following the illness or event that led to the absence. Any arrangement to make up work because of class absence is the responsibility of the student. The instructor, who will explain the evaluation (grading) statement at the beginning of the term, determines the effect of absences upon grades.

Students must attend the section of the course for which they are registered. No instructor has the authority to permit a student to shift from one section of the course to another without following official drop/add procedures. No student may drop a course after the seventh week of classes without the permission of his or her academic dean.

Until a student is officially enrolled in a course, they are not permitted to attend class, submit assignments, or take tests. Exceptions are limited to students auditing the course or making up work for a prior incomplete grade in the course. Students who are not officially registered for a course or do not appear on the course roster after the end of the second week of the semester should be referred to the appropriate office for approval to continue attending class. That may be the Office of Financial Aid, Student Business Services, the Office of the University Registrar, the Office of Admissions, etc. Students may contact the Office of the University Registrar if they are unsure of which office they need to contact for documentation.

University Health Services will issue "Provider Visit Verifications" to students if requested. Such verification may include, at the discretion of the medical provider (Physician, PA, APRN, LCSW, or Physical Therapist), recommendations about bed rest, restricted activity and follow-ups. Students who need notes for class excuses will be unable to obtain them from University Health Services if they have not been seen by a provider at UHS. Ultimately, the authority for deciding whether the student is excused for medical reasons rests with the instructor.

Students who are members of an intercollegiate team are required to attend all scheduled class meeting times or scheduled online activities associated with the course delivery. Absences due to illness, personal/family emergencies, or injury must be documented. Failure to adhere to the attendance policy may result in sanctions up to and including suspension from the athlete's sport for the remainder of the season. Student-athletes must remain eligible to enroll in order to maintain eligibility for all intercollegiate competition. Arranging to make up work missed because of legitimate class absence is the responsibility of the student.

Within the University there are several categories of students that are expected to exhibit behavior that conforms to the group to which they belong. These units include, but are not limited to, ROTC cadets, academic honor societies, veterans, athletes, medicine, and nursing majors. Membership within these units implies that the student agrees to fulfill the obligations of the organization.

Military Short-Term Absence or Call to Active Duty

Policies pertaining to accommodations for short-term absence of call to active duty, please refer to the "Student Veteran Information" chapter herein.

Academic Career, Academic Level and Classification of Students

The University classifies students based on whether or not they are degree-seeking. Degree-seeking students are further classified based on the type and level of degree they are pursuing. This classification is the academic career of the student. The University recognizes six academic careers, four degree-seeking and two non-degree seeking. Although rare, a student may be active in more than one career at a time, subject to the academic policies and requirements of each career and the degree requirements.

Degree-seeking careers:

- **Undergraduate:** students pursuing baccalaureate degree of any type
- **Graduate:** students pursuing master's, specialist, or doctorate degree of all types (except the juris master, master of law letters, juris doctorate, or doctor of medicine degrees)
- **Law:** students pursuing the juris doctorate (JD) degree, juris master (JM), or master of law letters (LLM)
- **Medicine:** students pursuing the doctor of medicine (MD) degree

Non-degree-seeking careers:

- **Non-Degree, without Baccalaureate:** students without a baccalaureate degree
- **Non-Degree, with Baccalaureate (post-baccalaureate):** students who have previously earned, at a minimum, one baccalaureate degree or higher level degree

Depending on the career of the student, the University may record the advancement of the student toward completion of the degree by tracking the academic level of the student. The academic level of undergraduate students is calculated on the basis of semester hours. Students with a career of Law or Medicine are classified based on their year within the program. Graduate students and various non-degree students do not have specific academic levels or classification.

- **Graduate:** admitted to a graduate program;
- **Law (JD degree):** first through third year;
- **Medicine (MD degree):** first through fourth year;
- **Non-Degree seeking without Baccalaureate Degree;**
- **Non-Degree seeking with Baccalaureate Degree;** and
- **Transient Students.**

Non-Degree Seeking Student Regulations

Academic rules governing regular students (e.g., fees, drop/add, withdrawal, grading policies) also apply to non-degree seeking students with the following exceptions:

1. Non-degree seeking students may enroll for fewer than twelve semester hours (underload) without permission.
2. In place of the retention schedule for regular students, non-degree seeking students **with** a baccalaureate degree must meet the following requirements: after attempting twelve semester hours, non-degree seeking with baccalaureate students must have achieved and must maintain a 3.0 ("B") average in all courses attempted.
3. Failure to achieve or maintain the appropriate grade point average (GPA) will result in a loss of registration privilege and dismissal from the University.
4. Non-degree seeking students may register for any course or courses on an S/U basis. Non-degree seeking students selecting courses for enrichment or other reasons where grades are not essential are advised to register on an S/U basis or on an audit basis.

Consult the "Academic Regulations and Procedures" chapter of the *General Bulletin* for policies relating to non-degree seeking student status at the undergraduate level. The Office of the University Registrar serves as the academic dean for all non-degree students.

Registration of Non-Degree Seeking Students

All non-degree-seeking graduate students may register for up to 18 credit hours; enrollment beyond this limit may be subject to approval by the Registrar.

All registration by non-degree seeking students is on a space-available basis. Because of excessive demand for some graduate courses, non-degree seeking students may be enrolled in such courses only with the permission of the graduate officer of that particular unit.

Reclassification from Non-Degree Seeking Student to Regular (Degree-Seeking) Status

Non-degree seeking students wishing to change to degree-seeking-student status must apply for admission through the Office of Admissions. Refer to the "Admissions" chapter of this *Graduate Bulletin* for admission procedures and deadline dates.

Work taken as a non-degree seeking student carries no degree credit. If the work is taken within the time limits prescribed by the degree program and approved by the department chair and dean at the time of formal admission or later, up to twelve hours of graduate-level credit with a grade of "B" or better in each course may count toward the degree, provided the student qualifies for admission to a graduate degree program.

Student Course Load

Recipients of stipends from the University, whether holders of fellowships or assistantships, must be full-time students as defined below. Non-degree seeking students are not required to obtain underload permission.

The University reserves the right to determine full-time status based on course and/or research load and stage of degree completion.

The standard full-time load for graduate students for certification purposes is twelve credit hours per semester, unless otherwise noted. For graduate students receiving a university or externally-funded fellowship, twelve credit hours per semester constitutes a full-time load. A student who wishes to register for fewer than twelve credit hours per semester must have written approval from his/her academic dean prior to registration. Included in the calculation of student load are credit hours of graduate credit other than formal coursework, e.g., credit hours in thesis or dissertation, in directed individual study, in supervised research, and in supervised teaching.

Some departments may permit such students to enroll on a part-time basis. A student who wishes to register for fewer than twelve credit hours per semester must have written approval from his/her academic dean prior to registration. For thesis-seeking master's students, after completion of the required coursework and six credit hours of thesis, master's students must be enrolled for a minimum of three credit hours per semester (of which at least two must be thesis hours) until completion of the degree. Doctoral students, after completion of the preliminary exam and twenty-four credit hours of dissertation, must be enrolled for a minimum of three credit hours per semester (of which at least two must be dissertation hours) until completion of the degree.

For graduate assistantship holders of a quarter-time or greater appointment, nine credit hours per semester is defined as a full-time load. Academic deans may grant exceptions to this policy for teaching assistants in those departments which conform to national course load policies in their disciplines.

To receive financial aid, all graduate students must be enrolled for at least six credit hours per semester.

The number of credit hours which a graduate student may carry without special permission is fifteen. A heavier load may be permitted by the student's academic dean.

For federal immigration reporting requirements, international (F-1 or J-1) students meet the full course of study requirement with enrollment of a minimum of nine credit hours in the Fall and Spring semesters, prior to completion of coursework. Departments may require additional enrollment, depending on department policy. After completion of required coursework, the standard university policy applies. An F-1 or J-1 student who wishes to reduce enrollment below the required levels must request permission, in advance, from an advisor at the Center for Global Engagement. For more information, visit <http://cge.fsu.edu>.

Directed Individual Study Courses

Students may enroll in courses directed by an instructor for individual study of a particular area. Individual academic departments or programs determine directed individual study policies for students taking directed individual study courses in that department or program. The directed individual study course title must be approved in writing by the instructor offering the course and the departmental chair, or representative, and is posted on the student's record.

Office of the University Registrar

University Registrar: Kimberly A. Barber; **Senior Associate Registrar:** Aimee Leturmy; **Associate Registrars:** Katie Cloud, Jeremy Johnson

Location: A3900 University Center; phone: (850) 644-1050; e-mail: registrar@fsu.edu; Web: <http://registrar.fsu.edu/>

The Office of the University Registrar is the official custodian of permanent academic records of all past and currently enrolled students at Florida State University. It is responsible for assisting departments and students with registration activities; maintaining student and departmental records for the term in progress; posting FSU credit, transfer credit, and grade changes; preparing transcripts; scheduling academic space; maintaining and updating curricula; certifying eligibility to receive credit for Credit by Examination; certifying attendance for loan purposes; implementing and monitoring academic regulations; certifying eligibility to graduate; and providing services and information to students, faculty, and administration. Reports and certifications of attendance and grade point average are made to governmental agencies, such as the Veterans' Administration, with the student's permission.

Students should consult this office with questions concerning registration, locations and meeting times of courses, errors in registration records, dropping and adding courses, cancellation of registration, grade problems, application for graduation, and degree or enrollment verification.

Report immediately all changes in permanent and local addresses, name, social security number, and residency to this office.

Persons with Disabilities. Any student in need of specific services and reasonable accommodations should contact the *Student Disability Resource Center*, 108 Student Services Building, (850) 644-9566, or visit <https://dos.fsu.edu/sdrc/>.

Registrar Cancellation of Schedule

Students allowed to register in error are cancelled by the Office of the University Registrar.

Students who are dropped or deleted from their last or only course by an academic department because of nonattendance on the first day of class are cancelled by the Office of the University Registrar. This cancellation is without liability for tuition. **Graduate, law, and medical students whose registration is cancelled by the University Registrar must apply for readmission if they have not been enrolled for two consecutive terms.** For the purpose of this policy the cancellation term is considered a term of non-enrollment.

Note: Students who have received some or all of their financial aid prior to the end of drop/add for a term, may be subject to repayment of financial aid if there is a change in their financial aid eligibility. Examples of this may include, but are not limited to, reduction of course load below required levels, cancellation of schedule, failure to meet satisfactory academic progress requirements, and other conditions required to maintain financial aid eligibility.

Cancellation of Student Schedules for Non-Payment of Tuition and Fees

In accordance with Florida State University Regulation 5.081 *Tuition, Fees, Payment*, students who do not pay tuition and fees or make arrangements to pay tuition and fees by the end of the established fee payment deadline may have their schedules cancelled and academic progress discontinued for the semester. Students whose schedules have been cancelled may not attend class or receive grades. Students will be notified using their FSU e-mail account concerning outstanding tuition delinquencies and given an opportunity to pay tuition and fees or make arrangements for tuition and fee payment with the Office of Student Business Services prior to cancellation. For more information, please reference <http://regulations.fsu.edu/content/download/21865/140868/file/Chapter5code.revised.11.2014-linked.pdf>.

Reinstatement of Student Schedules Cancelled for Non-Payment of Tuition and Fees

Students whose schedules are cancelled for non-payment of tuition and fees may submit a written appeal to the University Registrar for reinstatement and continuation of academic progress for the term. A written appeal must be submitted to the University Registrar no later than the end of the seventh week of classes as identified in the University Academic Calendar (consult the Registration Guide for term deadlines). Prior to a student's appeal being approved, the Office of Student Business Services must verify that payment for the current term has been received or that appropriate arrangements have been made for tuition and fee payment. Students whose schedules are reinstated are subject to a \$100.00 late registration fee and a \$100.00 late payment fee. Check or credit card payments that are returned or refused will negate any tuition payment agreement for the reinstatement of a student's schedule. The University reserves the right to deny reinstatement when a demonstrated pattern of tuition delinquencies over two or more semesters has occurred.

Note: The appeal must be submitted by the seventh week deadline for the term that was cancelled. Appeals received during the next term, for a prior term's cancellation, will be deemed to have missed the deadline and may not be considered.

Student Cancellation of Schedule

A student may cancel registration during the first four days of classes for a semester or Summer session by dropping all classes via their online student portal or submitting a written request to the Office of the University Registrar, A3900 University Center, or to Withdrawal Services, A4300 University Center. Notification may also be sent from the student's official e-mail account to Office of the University Registrar at registrar@fsu.edu. Beyond the fourth day of classes, a student cannot voluntarily cancel registration but must apply for withdrawal from the University. Students who cancel their registration within the first four days are not liable for tuition; if tuition has been paid, such students should request a full refund of fees. **Graduate, law, and medical students who cancel their registration and are not enrolled for the following term (non-enrollment for two consecutive terms) must apply for readmission.**

International students who wish to cancel their registration must request and receive prior authorization from a Center for Global Engagement advisor.

Note: Students who have received some or all of their financial aid prior to the end of drop/add for a term, may be subject to repayment of financial aid if there is a change in their financial aid eligibility. Examples of this may include, but are not limited to, reduction of course load below required levels, cancellation of schedule, failure to meet satisfactory academic progress requirements, and other conditions required to maintain financial aid eligibility.

Cancellation of Student Health Insurance

Cancellation of a student's full class schedule does not trigger the termination of the insurance policy or the premium. The student must contact the Health Compliance Office of University Health Services via e-mail at healthcompliance@fsu.edu to advise of the cancellation of schedule and request termination of the insurance. If the student has attended the first thirty-one calendar days of classes for the term for which coverage was purchased, the student has met the eligibility requirement to retain the coverage through the termination date and the cost of the insurance premium must be paid.

Students leaving the University to enter the military may receive a prorated premium refund. The student must contact the Health Compliance Office of University Health Services via e-mail at healthcompliance@fsu.edu.

Drop/Add or Changes of Schedule

During the first four days of classes, individual courses may be added, dropped, or sections of a course changed. Students are financially liable for all courses appearing on their schedule after the fourth day of classes. To add courses after the first four days of classes may require the academic dean's approval. Courses dropped during this period do not appear on the student's transcript. Individual courses may be dropped through the seventh week of classes with the exception of courses involved in allegations of academic dishonesty; however, tuition charges remain. Approval by the student's academic dean is required to reduce the academic load below twelve semester hours or increase an academic load above fifteen semester hours (to a maximum of twenty-one semester hours). Dean's approval for an overload or underload must be submitted to the Office of the University Registrar. If the student is appointed as a graduate assistant or is supported on a fellowship, an underload request form must be completed and submitted to the Dean of The Graduate School for approval.

After the seventh week of classes, courses may be dropped only in exceptional circumstances. Approval is required by the advisor and the academic dean. Such courses will appear on the student's transcript with the notation "WD." Students who register for courses but who do not attend the classes will receive grades of "F" if the courses are not officially dropped.

Note: Students who have a bachelor's degree and return for a second bachelor's degree may petition for a late drop within the same semester timelines as noted above.

Auditor Seating Privileges

All regularly enrolled students and persons not enrolled in the University are afforded seating privileges after registration on a space-available basis with permission of the instructor, approval of the Office of the University Registrar, payment of the prescribed fee for each course, and presentation of the appropriate form approved by the Office of the University Registrar. Since no credit is allowed for attendance via "seating privilege," formal admission to the University is not required, however, minimal demographical data must be provided as part of the approval and enrollment process. The course(s) taken will not appear on the student's permanent record. **Note:** The Office of the University Registrar serves as the academic dean for all non-degree students, including those individuals enrolling in courses on an audit basis.

Students are cautioned not to preregister for any course they intend to audit. They will have to drop the course(s) from their official schedule and will incur additional financial liability.

Note: Citizens 60 years of age or older who are Florida residents may attend classes under "seating privileges" criteria, and fees are waived except for those courses requiring individual instruction. All individuals auditing courses may register for up to 18 credit hours; enrollment beyond this limit in a single semester is not permitted.

Transcripts

The Office of the University Registrar issues official transcripts at the request of the student. Individuals needing official transcripts are encouraged to submit their request online at <http://my.fsu.edu> under the "Academics" section of Student Central. In cases where a student is unable to submit an online request, a written request may be made directly to the transcript section of the Office of the University Registrar.

Transcript service may be denied if a financial or judicial stop has been placed on a student's record. Clearance from the Controller's Office or the Office of Student Rights and Responsibilities must be obtained prior to the release of the transcript. Transcript service may also be denied if the request is made by a third party without the student's written consent.

A charge of \$10.00 will be assessed for each official transcript issued.

The University reserves the right to issue transcripts to other state of Florida schools for those students who attend the University under the state transient process. Students are responsible for any transcript fees incurred for providing these transcripts as required by the transient application process.

Unofficial transcripts are available to students free of charge. Visit <http://my.fsu.edu>, click **Course Quicklinks** and select **View Unofficial Transcript**.

Proof of Enrollment

All student enrollment verifications will be by official request only. Students in need of enrollment verification should submit an electronic request by logging into <http://my.fsu.edu>. Select **Enrollment Verification**. Follow the instructions to obtain your enrollment verification letter. Your letter will be processed the following business day. Written requests may be submitted directly to:

Office of the University Registrar
Florida State University
A3900 University Center
282 Champions Way
P.O. Box 3062480
Tallahassee, FL 32306-2480.

Former students or outside agencies may request an enrollment verification or degree verification online from the National Student Clearinghouse at <https://nscverifications.org/welcome-to-verification-services/>.

Access to Records

Students have the right to have access to their student records on file in the Office of the University Registrar. Students requesting access to information in their file, or a third party requesting information in a student's file **with the written consent of the student**, have the right to a response from the Office of the University Registrar within thirty days. When the record includes information on more than one student, only the information pertaining to the student making the request will be given.

Parental or Third Party Access to Records

Students may give a designated parent(s), or other third parties (i.e. sibling, spouse, etc.), authority to review their University financial status, grades, transcript, student profile, etc. by logging onto <http://my.fsu.edu> and clicking the **Share My Information** link. Granting access to a parent or third party to view information in this manner also authorizes University personnel to discuss those records with the designated parent or third party.

Registration

During each academic term, an official registration window is established for all currently enrolled, degree-seeking students who expect to enroll for the following term. Graduate students registering for their first term should consult with the departmental/program advisor prior to registering for classes.

Registration at Florida State University is conducted by logging in to <http://my.fsu.edu> and choosing "Enroll in Classes". Students can register online for all of their courses and can gain access to information concerning their tuition and fees. **Please note that by registering, students accept both fee and grade liability.**

Registration Guide and Course Schedules

Florida State University publishes the *Registration Guide*. The *Registration Guide* contains a list of all registration deadlines, fee and payment information, and important announcements specific to the semester. This information is published online at the Office of the University Registrar Web site, at <http://registrar.fsu.edu>.

Lists of course offerings, meeting times, locations, and instructors (when known) are available online through the **Class Search**. This system is available twenty-four hours a day, year-round. The Class Search is only available for newly admitted and current students through the myFSU portal (<http://my.fsu.edu>). Prospective students and all others may access a PDF listing of courses available on the University Registrar Web site through the “Snapshot of Class Search as a PDF (refreshed weekly)” link (<http://registrar.fsu.edu>).

Students are advised to organize their materials and plan their schedule before attempting to register online. Course listings for an upcoming semester will be available fourteen days prior to the first enrollment appointment for that semester. Students must contact the appropriate departmental office for any clearances or authorization needed. Individual instructors should be contacted for courses requiring instructor permission. It is important to take care of any academic or administrative hold (stop) before attempting to register.

Registration Responsibility

Students are responsible for meeting prerequisites and co-requisites for each course in which they are enrolled. Students who do not meet course prerequisites and co-requisites may be dropped by the academic department. Students are also responsible for any changes made to their schedule without an advisor’s approval through the drop/add process.

Students may attend and receive credit only for those courses in which they are properly registered. Likewise, students will be held responsible for every course for which they register unless they officially drop the course or cancel registration prior to the published deadlines.

Those students who register during late registration (normally the first four days of classes) will be assessed a \$100.00 late registration fee.

Course/Credit Modification

Graduate students who are seeking to modify course credit downward should consult with their supervising committee and academic dean before contacting the unit teaching the course. Course credit may be modified downward with the approval of the chair of the department that is offering the course and the appropriate academic dean. No course may be modified upward. Any student wishing to modify credit may obtain the necessary forms in the Office of the University Registrar.

Stops to Registration

Registration is prevented if all academic and/or administrative requirements have not been fulfilled prior to the term. A stop may be placed on the student record if one or all of the following deficiencies exist: academic dismissal, incomplete admissions documents, fiscal deficiency, or failure to process readmission papers after a withdrawal or after a two-term absence (including the Summer term) from the University (graduate, law, and medical students). Also, failure to meet specific requirements of a University college, school, or department, or the Office of Student Rights and Responsibilities, may result in a stop in registration activities or in the release of transcripts and diplomas.

A stop is placed on all students who have outstanding charges due to the University. Students owing any fees are not permitted to register for classes. The stop is not removed and such students are not permitted to register until the debt is cleared.

Students notified of a stop should contact the notifying office immediately and arrange for removal to be allowed to register for classes, receive official transcripts, and/or receive a diploma.

If students with a stop on their records are allowed to register in error, they are considered illegally enrolled in the University. If the stop is not removed after notification of such an error, the student’s registration is subject to cancellation.

Florida Agricultural and Mechanical University– Florida State University Interinstitutional Registration

A full-time student at one institution may enroll in one or more courses at the other institution under the following conditions:

1. Permission is to be given by the academic dean of the student’s home university,

2. Courses taken at the host university should be those normally not offered at the student’s home university,
3. Students taking courses at the host university on a satisfactory/unsatisfactory (S/U) basis will be held to the home institution policies regarding the total number of courses allowed on S/U basis or in a specific degree or major. Students are encouraged to consult their academic advisor about any limitations prior to registration,
4. The final grade obtained by the student shall be reported directly to the student’s home university for entering on the student’s transcript. Grades, credits, and quality points are treated as home-institution work,
5. All tuition and fees are paid to the home institution,
6. Students must maintain a minimum 3.0 cumulative Florida State University GPA to be eligible to participate in the co-op program. Prior to attempting twelve hours, students who fail to maintain the 3.0 GPA may consider themselves on probation, although no entry will be placed on their transcript, and they may continue to enroll, assuming all other conditions of eligibility are met. After attempting twelve hours, students must meet and maintain the minimum 3.0 cumulative GPA to continue enrolling through the program,
7. To register, see the FAMU–FSU Cooperative Program representative in the Office of the University Registrar. For engineering requirements, see the “FAMU–FSU College of Engineering” chapter of this General Bulletin.
8. Before students can register for classes they must provide proof of immunizations. Immunization compliance requirements are listed at <http://uhs.fsu.edu>. If the immunization document being submitted is the FAMU immunization form, two copies of the form are required.

Note: Faculty and full-time students at either institution have equal access to the library facilities at both institutions,

Interinstitutional Transient Students

This program enables students to take advantage of special resources and/or programs not available at their home institution. An interinstitutional transient student, by mutual agreement of the appropriate academic authorities in both the sponsoring and hosting institution, will receive a waiver of admission requirements of the host institution and a guarantee of acceptance of earned resident credits by the sponsoring institution except in the case of international credits. An official course-by-course evaluation is required for all academic records from non-U.S. institutions. We recommend the evaluation be done by a member of the National Association of Credential Evaluation Services (<http://naces.org>).

Interinstitutional transient students must be recommended by their own academic dean, who will initiate a visiting arrangement with the appropriate dean at the host institution. Students will register at the host institution, paying tuition and/or registration fees established by that institution. The approval of one institution does not bind the other to comply.

Students from other institutions who wish to take courses at Florida State University should submit an approved Interinstitutional Transient Student application to the Office of Admissions by the published deadline. (Consult the “University Calendar” chapter of this *Graduate Bulletin* for specific application deadlines.) Students may complete the transient form online at <https://www.floridashines.org/>.

Note: Academic rules governing regular students (e.g., fees, drop/add, withdrawal, grading policies) also apply to transient students. Transient students attending Florida State University are, by definition, classified as non-degree seeking students.

Faculty Members Seeking Advanced Degree

No faculty member in a tenure-earning position (e.g., assistant professor, associate professor, or professor) may work toward an advanced degree at the University. Exceptions are made when the faculty member already holds the terminal degree in their field and wants to pursue either another PhD in a different field or a less advanced degree than the one they hold (e.g., a faculty member holding a PhD may pursue a master’s degree).

Undergraduate Course Examinations

Graduate students enrolled in undergraduate courses are subject to the Undergraduate Course Examination Policy. For more information, refer to the “Academic Regulations and Procedures” chapter of the *General Bulletin*.

Grading System

Definition	Grade	Quality Points Per Credit Hour
Excellent Law	A+	4.25
Excellent	A	4.00
	A-	3.75
Good	B+	3.25
	B	3.00
	B-	2.75
Average	C+	2.25
	C	2.00
	C-	1.75
Poor	D+	1.25
	D	1.00
	D-	0.75
Failure	F	0.00
Honors Medicine	HM	4.00
Pass Medicine	PM	3.00
Administrative Failure Law	AF	N/A
Administrative Disenrollment Law	AD	N/A
Pass	P	N/A
Satisfactory	S	N/A
Unsatisfactory	U	N/A
Incomplete	I	N/A
Incomplete Expired	IE	0.00
No Grade Received from Instructor	NG	N/A
No Grade Expired	GE	0.00
Withdrawn while Passing	W	N/A
Withdrawn with Dean's Permission	WD	N/A
Examination Credit	EC	N/A
Departmental Examination	ED	N/A

Grade Point Average

Florida State University reports three types of grade point averages (GPAs) on the transcript, 1) term (or FSU Cumulative) GPA, 2) transfer credit, 3) combined overall. Quality points are assigned for each semester hour as listed above. In computation of the required grade point average (GPA) for retention and conferral of a degree, the total number of quality points is divided by the total number of semester hours for which letter grades are received. A student will not be allowed additional credit in subsequent attempts unless the course is specifically designated as repeatable to allow additional credit. Repeatable courses may be taken to a maximum number of times or hours as spelled out in the course description. Course enrollment beyond these limits may not be counted towards the student's credit hours. Should a student enroll in a non-repeatable course the quality points associated with the subsequent enrollment will be calculated into the FSU cumulative GPA.

With the approval of the department, the academic dean, and the Dean of The Graduate School, some graduate coursework taken at Florida State University will be excluded from the student's GPA. Permission for the Florida State University GPA to begin as a new calculation for graduate students shall be granted in the following admission/readmission circumstances:

1. When seven or more years have elapsed since a student was actively enrolled in a graduate degree program at Florida State University;
2. A student has earned a master's/specialist/doctoral degree from Florida State University and is seeking a second master's/specialist/doctorate; or
3. A student has earned a master's/specialist degree from Florida State University and is seeking a doctorate in a different major.

Aside from these exceptions, the Florida State University GPA will **not** begin as a new calculation for graduate students in the following circumstances:

4. During any period of time less than seven years in which the student was not actively enrolled in a graduate degree program at Florida State University; or
5. A student has earned a master's/specialist degree from Florida State University and is seeking a doctorate in the same major.

6. A student who transfers from one degree program and/or major to another.

All requests for exception to this policy and its specifications must be endorsed by the students' academic dean and submitted to the Dean of The Graduate School for approval.

Satisfactory/Unsatisfactory Course Option

With the permission of the major professor or chair of the student's major department, a student may enroll in as many as six semester hours during the master's degree program or up to nine semester hours during the doctoral program on a satisfactory/unsatisfactory basis. A student's registration in a course under the S/U option must be indicated on the proper form to the Office of the University Registrar from the major professor or chair of the student's major department. A student may change to a letter-grade (A, B, C) or S/U basis during the first seven weeks of the Fall/Spring semesters or, in the case of Summer terms, by the prorated deadlines published in the Summer 'Academic Calendar' in the *Registration Guide*. Please note that some courses are offered for S/U grade only and are not available for a letter grade.

Semester hour restrictions as stated above on the S/U option do not apply to courses normally offered on the basis of the S/U grading system, including courses in the College of Law for students of other graduate programs. Such hours are exempt from the total stipulated as permissible in the preceding paragraph.

In individual study, thesis, dissertation, recital, supervised research, and internship credit, as well as for courses taken on the S/U option, the assigned grade will be "S" (satisfactory) or "U" (unsatisfactory). Although course hours with a grade of "S" will be credited toward a degree, the "S" and "U" grades are not used in determining grade averages for admission to candidacy or for conferral of a degree.

Incomplete Grade Policy

Incomplete ("I") grades should be recorded only in exceptional cases when a student, who has completed a substantial portion of the course and who is otherwise passing, is unable to complete a well-defined portion of a course for reasons beyond the student's control. Students in these circumstances must petition the instructor and should be prepared to present documentation that substantiates their case. Incomplete grades should not be granted in order to allow students to do extra coursework in an effort to increase their grade.

Even under these circumstances, the authority for determining whether to grant an incomplete rests solely with the instructor. A graduate teaching assistant must have approval from a supervising faculty member to grant an incomplete. One exception to this guideline occurs when an incomplete is applied as a result of allegations of academic dishonesty that have not been resolved by the end of a semester. Deans' offices can often provide guidance to instructors regarding the appropriateness of an incomplete grade in individual cases.

In order to assign an incomplete, an instructor is required to indicate on the grade roster the time frame for resolution of the grade and the default grade to be assigned if the student does not complete the remaining academic work. Some departments also require that an incomplete grade be documented with an "Incomplete Grade Agreement." It is the student's responsibility to complete the remaining academic work within the agreed-upon time frame.

Under University policy, an incomplete grade automatically reverts to the predetermined default grade at the end of the semester that has been specified by the faculty member as the time frame for resolution, unless one of two conditions is met:

1. Upon completion of the agreed-upon work, the instructor submits a grade-change form that replaces the "I" with the final grade for the course;
2. The instructor submits a separate "Incomplete Extension of Time" form to the Office of the University Registrar before the end of the semester in which the "I" is set to expire.

In cases where no default grade or instructor-determined expiration semester exists, incomplete grades will expire to an IE (Incomplete Expired) at the end of the next term of enrollment unless the instructor submits a grade change form prior to the official grade posting deadline. An incomplete grade should not be set as the default grade for an existing incomplete. Furthermore, grades are awarded based on progress of work completed during a set semester/term and as such, a graduate student should not receive several semesters of incomplete grades for thesis, treatise and/or dissertation hours until completion of the defense. No grade changes will be made to default grades or unresolved "I" grades after the degree has been granted. Thus, it is critical that an instructor work closely with the student and department staff regarding the clearance of an incomplete grade.

Grading Practices

At the end of each term, student's grades are made available at *my.fsu.edu*.

Once a final grade in a course has been reported by the instructor to the Office of the University Registrar, it cannot be changed by the instructor except in cases of error in recording with permission of the department head and the dean of the college, or as a result of a final determination from a formal grade appeal.

The University will not automatically expire "I" grades earned prior to Fall 2010 or "NG" grades earned for any semester. Students must work with faculty and academic deans to resolve any outstanding "I" or "NG" grades prior to graduation. Outstanding "I" or "NG" grades that are not resolved prior to the degree posting will not be changed except in cases of error in recording. Faculty and academic deans reserve the right to expire an "I" or "NG" grade to "IE" or "GE" respectively. These grades are considered final grades and will calculate as an "F" in the student's overall GPA. In cases where the "I" or "NG" grade was earned in a course approved for numeric grades or "S/U", the grade will expire to the lowest possible value, generally a 60 or "U". Grades of "I" are not assigned to any courses if a student withdraws from the University. A grade of "I" or "NG" in a course that is approved for "S/U" or numeric grades will follow the same grading and expiration policy.

Grades earned at another institution cannot be used to improve a grade point average or eliminate a quality point deficiency at Florida State University.

Grade Changes to Courses Completed Prior to Posted Degree

Once a degree has been awarded, all coursework leading to that degree is considered final and not subject to change. Grade changes or withdrawals for coursework that applies to the awarded degree may be considered only in cases of documented University error or in cases where the courses in question are documented as applying to a degree that is still in progress. Courses that are designated as "shared" between degree programs, such as those used in combined or joint degree pathways may not be changed unless both degrees are still in progress.

Forgiveness Policy

Effective Fall 2004, Florida State University discontinued the forgiveness policy for all students. Please refer to the 'Drop/Add or Changes of Schedule' section in this chapter for additional information.

Academic Standing and Retention

The University reserves the right to exclude at any time a student whose conduct is deemed improper or prejudicial to the interest of the University community or whose academic performance is substandard, regardless of GPA.

A graduate student, excluding College of Law students and MD candidates in the College of Medicine, whose cumulative grade point average for graduate courses (5000 and above) taken at Florida State University falls below 3.0 at the end of a term (not counting courses for which "S" or "U" grades may be given) will be considered not in good standing by the University and will be placed on academic probation. If a 3.0 cumulative grade point average is not attained by the end of the next full term of enrollment, the student will be placed on academic dismissal. Academic dismissal constitutes a separation of the student from the University for academic reasons. Students on dismissal will not be permitted to register for graduate study, including registering as a non-degree student. However, at the time of dismissal, the major professor and/or department chair/director may petition the academic dean for consideration of special circumstances that the professor thinks constitute justification for an exception to this regulation, but under no circumstances will a student be allowed more than one additional term of probation after reinstatement. Owing to the differential uses of the designation, "academic probation" shall not appear on permanent records of regular graduate students. After one probationary period, however, a student whose average falls within the probationary range will receive automatic dismissal. Statuses of "academic warning," "probation," or "reinstated from dismissal" do not specifically prohibit a student from participating in extracurricular activities unless otherwise specified by University policy, rules, or by-laws governing the activity or organization. Consideration of the academic dismissal takes priority over any readmission application and must be resolved first. Students on dismissal are not eligible for readmission or the readmission appeal process unless they have first been reinstated by the academic dean. The academic dean is the final authority for reinstatement considerations.

Students pursuing multiple degrees under different careers (i.e., graduate and undergraduate simultaneously) are subject to the retention standards of

the career associated with each degree. Dismissal from one career does not automatically constitute dismissal from the second career when those careers are different (undergraduate and graduate).

Dismissal and Reinstatement for Professional Colleges

College of Law students who maintain an unsatisfactory cumulative grade point average are subject to academic oversight and may not register for classes without receiving schedule approval from the Associate Dean for Academic Affairs. Each semester, the College of Law academically dismisses any student who has failed to maintain the minimum cumulative grade point average. Students may also be academically dismissed for receiving an excessive number of unsatisfactory course grades. The College of Law has no probationary period for academic dismissal and no right to return. Students who have been academically dismissed must apply for readmission to the College of Law. The complete policies for academic oversight, academic dismissal, and readmission are specified in Section 13 of the College of Law's Academic Rules, Policies, and Procedures Bylaws.

For students in the College of Medicine, the Student Evaluation and Promotions Committee (SEPC) reviews each student at the end of each semester and academic year and makes decisions regarding retention and promotion. The SEPC may require an adjustment of academic load, repetition, dismissal, or other change of status based on unsatisfactory academic performance and/or displaying behavior that fails to meet the level of professionalism reasonably expected of medical students and future physicians. Students may be allowed to repeat an academic year once and will remain on probation for the entire duration of that repeated academic year. The complete policies for promotion, remediation, probation, and dismissal are specified in the College of Medicine's Student Handbook.

Continuous Enrollment

Continuous enrollment at Florida State University is defined as enrollment without an interruption of two or more consecutive semesters (including Summer term). Credits earned at other institutions during any semester while not registered at Florida State University will not constitute continuous enrollment at the University. **Graduate, law, and medical students who are not enrolled at the University for two or more consecutive semesters (or consecutive semester and Summer term), and who are not on approved leave of absence, must apply for readmission before resuming their studies.**

Leave of Absence

Under special circumstances, graduate students may apply for a leave of absence from the University for a specific period of up to three consecutive semesters (includes Summer term). The circumstances justifying a leave include, but are not limited to: personal or family medical conditions, call to active military duty, parental leave, death in immediate family, or completion of an off-campus internship. The student must provide appropriate documentation and a rationale for the leave request.

To apply for a leave of absence, a student must complete the Request for Leave of Absence Form at <http://gradschool.fsu.edu/> and submit it together with appropriate documentation to the major professor/advisor/Program Director. If the major professor/advisor/Program Director approves the application it should then be forwarded to the department head and subsequently to the college dean for consideration. If approved at all of these levels, the college dean should notify the Registrar and the Dean of the Graduate School of the decision. The college dean should also notify the student of the decision (approved or denied). The Registrar will place a notation on the student's record. A student who is denied a request for leave at any step may appeal the decision to the Dean of The Graduate School. Retroactive Leave of Absence Requests are not permissible.

An approved leave of absence preserves the student's academic status in his or her degree program, and the time off will not be counted against the time limits for awarding degrees. Consequently, registration is not required during the leave period and the student need not re-apply to the program to return to active status at the end of the approved leave period. A leave may be extended for additional consecutive semesters (includes Summer term). A student should apply for the leave extension no later than four weeks prior to the end of the final semester/term of his or her initial leave to allow time to consider and process the request. Extension of a leave is subject to approval of the program, college, and the Graduate School. The cumulative number of consecutive leave semesters (including summer term) shall not exceed six. The total consecutive or non-consecutive leave time a student is not registered in the program shall not exceed twenty-four months. At the conclusion of the approved leave, a student must enroll at Florida State University and return to active status no later than the start of the next academic semester. Students cannot be on leave during their semester of graduation and must be registered for a minimum of two hours that semester.

A student on a leave of absence may terminate the leave at any time prior to the approved ending date. In such cases the student would be immediately subject to the continuous enrollment and registration policies. Students returning from a leave of absence of more than one year will be required to disclose any legal or campus disciplinary charges that arose during the leave and provide updated contact and mailing address, residency documentation, and other biographical information as required by the University for reporting and processing purposes.

Programs may have more strict leave of absence and registration policies. For example, a program may decide that under no circumstances would it allow a formal leave of absence or a program may choose to only allow a leave of not more than three consecutive semesters. Such policies shall be detailed in the program's graduate student handbook.

While on leave a student will not have access to campus facilities and personnel. This means a student will not have access to labs, libraries, and online resources that require an FSUID. Students on leave cannot remain in student housing. There is no guarantee that financial aid will be continued. Students with financial aid or student loans should confer with the Financial Aid Office and review their loan agreements prior to requesting a leave of absence to ascertain the consequences a leave will have on their loan status. University assistantship and fellowship support will be discontinued for the duration of the leave. Programs are not obligated to reinstate funding support that was provided prior to the leave though they are encouraged to do so if funds are available. Students receiving external support, e.g., an NSF Graduate Research Fellowship, should check the terms of the award to determine the impact of being on leave. In-state residency status may be impacted if the student moves out of the State of Florida, and then returns to resume the degree program. Students should seek guidance from the Registrar on the potential impact on in-state residency. International students should check with the Center for Global Engagement to determine if a leave would adversely affect their visa status. Students should also consider other factors that might impact their circumstances upon their return to active status. For example, a major professor might depart the University, or under extreme circumstances a degree program might be suspended or terminated. The University has an obligation to provide a path to completion for enrolled students as well as students on a formally approved leave of absence.

Note: If allowed by the student's academic program and University policy, an alternative to taking an official leave could involve reducing the standard course load temporarily because of exceptional personal circumstances.

Readmission

Please refer to the "Admissions" chapter in this *Graduate Bulletin* for readmission policies for returning students who have not been dismissed.

Withdrawal from the University

All graduate, law, or medicine (MD degree) students who wish to leave the University after the close of the drop/add period for a term must formally withdraw. Dropping all classes does not constitute formal withdrawal. Students who do not attend classes and fail to withdraw will be assigned grades of "F" for each course. Withdrawals are initiated in the withdrawal services section of the Office of the Dean of Students.

Withdrawal requests are not automatically approved but must be requested. Withdrawals are initiated in the withdrawal services section of the Dean of Students department in the University Center. The statement "Withdraw from the University" will appear on the transcripts of students who properly withdraw within the first seven weeks of class. Under documented exceptional circumstances (beyond the student's control), as determined by the appropriate academic dean, a student withdrawing from the University may receive "WD" grades in all courses taken that term.

Students who cancel their enrollment during the first four days of classes for a term are not held liable for tuition and registration fees. Those who have paid are eligible for a full refund. Students who withdraw after the first four days of classes but prior to the end of the fourth week of classes are eligible for a twenty-five percent refund of tuition and registration fees, less the building and capital improvement fees; this deadline is adjusted for shorter Summer terms. Students who withdraw after this deadline are fully liable for fees and are not eligible for a refund, except as provided in policies set forth by the State Board of Education and Florida State University. Students who receive Title IV funds and who decide to withdraw from the University may be required to repay some or all of the funds received. Students who are withdrawing and who have purchased the student health insurance through the University should contact the Health Compliance Office at University Health Services for information about their health insurance and whether they are eligible to cancel coverage.

A graduate, law, or medicine (MD degree) student wishing to reenter the University for the following two semesters after withdrawal must have the ap-

proval of their academic dean on the 'Application for Withdrawal and Reentry' form. For degree-seeking students wishing to reenter the University after two semesters, an application for readmission must be submitted to the Office of Admissions. Formal application must be made to the Office of Admissions by the published deadline. Students who left the University on dismissal must resolve that and be reinstated by the academic dean before any decision can be made on the readmission application. (Consult the "University Calendar" chapter of this *Graduate Bulletin* for specific application deadlines.)

International students who wish to withdraw **must** request and receive prior authorization from a Center for Global Engagement advisor.

For further information on refunds, see the 'Refunds of Fees' section in the "Financial Information" chapter of this *Graduate Bulletin*.

Student-athletes who wish to withdraw must receive prior authorization from Student-Athlete Academic Support.

Students who are withdrawing and who have purchased student health insurance through the University should contact the Health Compliance Office at University Health Services for information about their health insurance and whether they are eligible to retain coverage.

Readmission after Multiple Withdrawals

When a graduate, law, or medicine (MD degree) student has withdrawn from the University three or more times, subsequent readmission must first be considered by the University Withdrawal/Reinstatement Committee whose charge is to assess the student's capability of making satisfactory progress toward degree. This committee, appointed by the Council of Associate and Assistant Deans, will then make a recommendation to the dean of the student's college, who will make the final decision in cases where a student's Florida State University GPA is less than twelve quality points deficient. In cases where the student has excessive withdrawals or dismissals, or has a Florida State University GPA that is more than twelve quality points deficient, the University Withdrawal Reinstatement Committee will make the final determination.

University Withdrawal/Reinstatement Committee and Deadlines for Requesting and Processing Withdrawals

Students petitioning for a withdrawal are expected to submit their requests and documentation in a timely fashion following the date the withdrawal is initiated. There are three types of withdrawals (see below). Depending on the type of withdrawal the academic dean may review the withdrawal or it may be required to be submitted to the University Withdrawal/Reinstatement Committee. Students considering a withdrawal should discuss their options with their academic advisor or dean prior to any deadlines.

1. **Current term.** Students may request a withdrawal for the current term at any point during the term after the official drop/add period. Withdrawals submitted prior to the last day of classes for the same term are considered current term withdrawals. Students should check the Academic Calendar for the date of the last day of classes for the term in question. The academic dean may render decisions to approve or deny withdrawal requests in accordance with University and college policies and procedures. Students are held grade liable for all classes for withdrawals requested after the 7th week of the term. Current term withdrawals may result in a "WD" grade appearing on the transcript.
2. **Retroactive withdrawals initiated within one year** (three terms, including the current term and summer): These withdrawals are considered retroactive withdrawals and are reviewed by the academic dean in a fashion similar to current term withdrawals. Students should first meet with their academic dean to determine the steps to petition for a retroactive withdrawal. Students' academic deans may require additional documentation for retroactive withdrawals. The academic dean may render decisions to approve or deny withdrawal requests in accordance with University and college policies and procedures. No petitions will be accepted after the student's degree has posted.
3. **Retroactive withdrawal over one year.** Withdrawals initiated, but not completed or approved within one year, are only considered by a student's dean's office in extraordinary circumstances. Students should first meet with their academic dean to determine if their request for a withdrawal over one year will be considered and then if so, they should submit any required supporting documentation of extenuating circumstances. The academic dean may render decisions to approve or deny withdrawal requests in accordance with University and college policies and procedures. No petitions will be accepted after the student's degree has posted. If approved, retroactive withdrawals will have "WD" grades assigned.

The decision of the University Withdrawal/Reinstatement Committee constitutes final University action.

Medical Course Drop/Withdrawal

Medical course drops are generally approved for unforeseeable illnesses or injuries that have interfered with the student's ability to complete specific course(s). Similarly, medical withdrawals (all courses dropped) may be approved for acute, severe illnesses or injuries that incapacitate the student. Chronic conditions generally do not qualify unless the student has been stable for a sustained length of time and then experiences an unexpected change in health status. Students with chronic or recurring health problems should consult with their clinicians and carefully assess a realistic class schedule based on their condition and their likelihood of relapses. Courses approved to be dropped or withdrawn under these circumstances may be noted on the transcript with "WD" grades.

Note: For information regarding medical course drops and medical withdrawals, visit <https://dos.fsu.edu/withdrawal/withdrawal-process-information/> or call the Office of Withdrawal Services at (850) 644-1741.

Guidelines for Field Placement Fitness

These guidelines apply to all student field placements, including internships, practicum experiences, and student teaching. The University has the authority to determine both the fitness of its students to be placed in field placements and the suitability of particular field placement sites. The academic judgment of qualified faculty, on issues relevant to the professional requirements of a given field, is critical to this process.

Students may either be denied a field placement or removed from a placement on the basis of the academic judgment of qualified faculty. Students have the right to be informed of the academic and non-academic requirements for obtaining a field placement early in their majors. They also have the right, except in emergency cases, to receive notice of their deficiencies and an opportunity to correct those deficiencies prior to a final decision. Students should consult the information provided by each specific college, department, or academic program of interest for more detailed information.

FloridaShines Information

All current and prospective students of higher education in the state of Florida may access the FloridaShines Web site. By logging on to <https://www.floridashines.org> you can perform a variety of tasks, including the following:

- View a map indicating the location of every participating college or university
- Search course catalogs from all public and many private Florida colleges and universities
- Get questions answered about financial aid
- Plan your course of study and compare majors and degree requirements
- Get a copy of your unofficial transcript
- Investigate career options through your institution's career center
- Find out general information about every participating college or university in the program.

Each FSU student may use their University FSUID and password to log on to the FloridaShines Web site.

Supervised Research and Teaching

Students may be granted credit for supervised research and supervised teaching at the option of their department. A student may register for such activity in more than one term, using the same numbers and, again at the option of the department, may count the hours in meeting residency requirements for the degree program. No more than three semester hours of supervised research credit and three semester hours of supervised teaching credit may be counted toward the master's degree. The limit for candidates for doctoral degrees is five semester hours in each category.

Credit for Short Courses

Short courses are offerings that are not regular curricular offerings. Credit will not be given for any short course or for similar program in excess of the equivalent of one credit hour for each week of the program, provided that each week contains the equivalent of fifteen contact hours. In no case shall credit be given for any short course or institute or similar program having a duration of less than two full weeks.

Individual Study Courses

A student registered for an individual study course must attend at least one conference a week on the campus. Directed individual studies are not permitted during an intersession period. The graduate-level directed individual study (DIS) is for S/U or letter-grade credit at the discretion of the department.

Transfer Credit

The University accepts transfer credit from all nationally accredited institutions (or comparable institutions with certain limitations depending on the type of degree being pursued. See the "Graduate Degree Requirements" section of the *Graduate Bulletin* for details.

Changing of Major Department

Admission to graduate study is contingent on approval by the department in which the student proposes to major. Therefore, an enrolled student is not free to change major departments at will. A change must have the approval of the chair of the department into which the student proposes to transfer and of the academic dean of that department. The appropriate signed documentation should be forwarded to the Office of the University Registrar.

Degree-Seeking Status at Two Separate Institutions

Under certain circumstances students may wish to pursue degrees at Florida State University and another institution simultaneously. In all cases students in this situation must consult their Florida State University academic advisor and academic dean to request approval in advance. If approval is granted, students may enroll at Florida State University and another institution under the following conditions:

1. Students are responsible for complying with all rules, regulations and policies of both institutions, including but not limited to: admission standards; academic rules; residency; fees; graduation requirements; university, college and departmental deadlines; and student codes of conduct. Florida State University is under no obligation to waive or otherwise modify any policies, requirements, or deadlines to facilitate the student's enrollment at another institution.
2. Enrollment certification and degree verification issued by Florida State University will be based solely on current registration hours with Florida State University and any awards, honors, or degrees posted by Florida State University. The University will not combine enrollment or degree verification with another institution.
3. Students receiving financial aid must designate one institution as the primary institution for financial aid distribution. The primary institution will be responsible for monitoring awards and delivery of financial aid. Florida State University will not combine enrollment hours with another institution for financial aid purposes.
4. Students who are planning to transfer courses to Florida State University should seek advising in advance of doing so. The University limits the number of transfer hours a student may bring in depending on the type of degree and program. Hours used to satisfy a previous degree, either at Florida State or another institution, cannot be counted toward the current degree the student is pursuing.

Note: Different conditions, rules, and policies may apply in the event that Florida State University has an approved consortial or cooperative agreement with the second institution. Students should be aware that approval by Florida State University to pursue degrees at Florida State and another institution in no way binds the other institution to a similar approval. Students are encouraged to consult with the second institution about its policies before enrolling in any courses.

Official E-mail Accounts for All Students at Florida State University

The official method of communication at Florida State University is your FSU e-mail account. In order to stay informed and aware, you are required to set up and maintain your account and check it regularly. If you choose to have your official FSU account forwarded to another e-mail account, you are still held responsible for all information distributed by the University to your FSU account.

Florida State University's Information Technology Services now offers new communication and online collaboration services for students and alumni, which includes:

- A free 10GB lifetime [@my.fsu.edu](mailto:my.fsu.edu) e-mail account
- Up to 25GB of free cloud-based file storage
- Free online computer backup/synchronization utilities
- Free online collaboration tools
- Online MS Office Web Applications
- Mobile access to FSU e-mail and more...

Students and alumni should go to <http://its.fsu.edu/service-catalog/communication-collaboration/office-365/studentalumni-email-service> to confirm their settings.

Questions regarding the activation of myFSU accounts can be answered by calling 644-HELP (4357) or visiting <https://its.fsu.edu/its-service-desk/>.

Student Addresses and Contact Information

Students are required to maintain their current local and permanent addresses with the University. Address updates may be done online at <http://my.fsu.edu> by clicking on the address link under the “Personal Information” section of the Student Center or in person at the Office of the University Registrar, 3900 University Center A. Students are strongly encouraged to provide emergency text numbers and contact information.

GRADUATE DEGREE AND CERTIFICATE REQUIREMENTS

Prerequisites for All Graduate Degrees

Graduate work in any department must be preceded by sufficient undergraduate work in the field or a related one to satisfy the chair of the department that the student can successfully conduct graduate work in the chosen field.

A student is expected to have sufficient command of the English language to enable the student to organize subject matter and to present it in credible written form. Any faculty member may at any time refer a student to the Reading/Writing Center of the Department of English for noncredit remedial work.

Editing Services and Statistical Assistance

The following guidelines have been approved by the graduate policy committee:

1. University regulations are quite clear concerning plagiarism and inappropriate assistance; these regulations apply with particular force to theses and dissertations: "...violations of the Academic Honor Policy shall include representing another's work or any part thereof, be it published or unpublished, as one's own" - Office of Faculty Development and Advancement Web site, Faculty Handbook. Appendix A: Florida State University Academic Honor Policy;
2. The ready availability of editing services and statistical assistance, and in particular of computer and statistical research design assistance, must not be seen as a substitute for required training and/or coursework;
3. Professional editing services may not become a substitute for faculty advisement and should be confined to language structure;
4. The major professor must be informed and concur before a student seeks assistance in any or all of the editing or statistical assistance areas, and faculty concurrence should be documented as part of the student's record. The particular scholarly work in question should be reviewed prior to such assistance, so that issues of scholarly form and content have been dealt with in advance of the use of such services. The student must confer with the major advisor before incorporating any advice obtained through the above-mentioned services into written work;
5. In all cases, such assistance must be noted in the acknowledgments accompanying the final version of a paper, thesis, or dissertation.

Review of Theses, Dissertations, and Treatises

Theses, treatises, and dissertations are expected to reflect original work. The review of academic integrity should be completed prior to the defense. Faculty may choose to use appropriate plagiarism checkers and peer review tools with early drafts of these manuscripts as an instructional aid in advising students on matters relating to plagiarism. The approvals of all committee members appearing on the online Manuscript Signature Form constitute testimony from the committee that they are satisfied that the thesis, dissertation, or treatise meets FSU's standards of academic integrity as described in the FSU Academic Honor Code and appropriate steps have been taken to assure that this is the case.

Language of Theses, Dissertations, and Treatises

The typical language of the dissertation, treatise, or thesis is English. Under special circumstances the Major Professor, the Academic Unit Head, and the Supervisory Committee may approve writing the body of the thesis/dissertation in a language other than English if doing so is essential for scholarly reasons. Lack of sufficient English competency is not an acceptable justification for using an alternative language. The Major Professor shall immediately notify the Dean of the College and the Dean of the Graduate School for all cases where such approval has been granted. Notification requires completion of the ETD Alternative Language for the Dissertation/Treatise/Thesis Form. All committee members must be completely proficient in the alternative language. It is the responsibility of the Major Professor and the Supervisory Committee to ascertain that the candidate's thesis/dissertation is written in acceptable English or an alternative language, in an appropriate scholarly style. All non-English-language dissertations, treatises, or theses must have the preliminary pages and main section headings in English. This would include the content of the title page, committee page, acknowledgments, abstract and biographical sketch. All main section headings, including chapter and appendix headings, must be in English, but chapter/appendix titles may be in the chosen language.

Language of the defense

The defense shall be conducted in English.

Graduate Students Enrolled for Two Degrees Simultaneously

Under certain special circumstances it is possible for a student to work concurrently on two degrees in two different departments. Students intending to do this must be accepted by both departments. A Dual Enrollment Request Form showing endorsement by both department heads and dean(s), as appropriate, must be sent to the Dean of The Graduate School for approval. Once approved, the Office of the University Registrar will be notified of the dual registration. Dual Enrollment Request Forms must be submitted for review/approval at the correct time to ensure proper advisement, prior to the graduate student completing 12 hours in the second degree program and before the student has reached the final semester and applied for graduation so there are no delays in graduation clearance.

Note: Initial admission to a graduate program at Florida State University must be to one program only. After the first semester, the student may apply and be accepted to the second degree program desired.

Second Graduate Degrees

University policy prohibits the awarding of more than one degree from a specific degree program due to the overlap of core requirements of that degree program. Students should seek guidance from their advisors or their college when choosing to pursue a dual degree. This policy applies to both current and readmitted students.

Combined Bachelor's/Master's Pathways, Joint Graduate Pathways, and Dual Degrees

If a student is effectively removed from a combined pathway or joint pathway, then there will be no sharing or double-counting of credit hours. Any graduate coursework previously taken and shared/double-counted will no longer apply.

Combined Bachelor's/Master's Pathways. Combined bachelor's/master's pathways provide academically talented undergraduate students an opportunity to complete both a bachelor's and a master's degree. Upon approval, a combined bachelor's/master's pathway allows for up to 12 graduate hours to be shared with, or double-counted toward, an undergraduate degree program.

Joint Graduate Pathways. Joint graduate pathways provide qualified master's students with an opportunity to earn two master's degrees or master's/professional degrees from two academic degree programs. Joint graduate pathways share academic content that allows a student to expand their breadth of knowledge and content expertise to include additional domains not covered in a single degree. All post-baccalaureate degree programs must have at least 30 unique hours of coursework. Upon approval, joint graduate pathways allow graduate/professional courses in excess of the 30-hour minimum to be shared with, or double-counted, toward both degree programs.

Dual Degree Programs

Dual degrees are two degrees earned simultaneously when a student is accepted by both departments/programs and is approved by the appropriate academic deans and the Dean of The Graduate School. A student must be admitted to one academic program initially, and after the first semester, may apply and be accepted to the second degree program. There is no formal relationship between the two degree program requirements in a dual degree situation.

To ensure that students entering a second graduate degree program receive timely and effective advisement on a program of study approved by the second department, admission to the second graduate degree program must be approved before the student completes more than twelve credit hours of coursework that are counted in that department toward the second graduate degree. In special circumstances, students may petition their academic deans for an exception.

This limit of twelve credits earned only applies to students admitted to their first graduate degree program in the Fall 2014 semester and onwards.

Dual Enrollment Request Forms must be submitted for review/approval at the correct time to ensure proper advisement, prior to the graduate student completing 12 hours in the second degree program and before the student has reached the final semester and applied for graduation so there are no delays in graduation clearance.

Graduate Level Certificate Programs

The university offers a variety of certificate programs, which consist of an organized curriculum of courses that lead to specific educational or occupational goals. A list of all of the certificate programs offered by the university is available in the Academic Degree and Certificate Programs chapter of this *Graduate Bulletin*. These programs are generally considered professional in nature and the completion of these programs are noted on the student's official university transcript, if the following conditions are met:

1. The student must apply and be admitted into the certificate program in order to be officially recognized as pursuing the program by the university.
 - a. Some certificate programs may be restricted by degree level or offered only to degree-seeking students, while others are open to all enrolled graduate and post-baccalaureate non-degree students.
 - b. The admissions criteria may include previous educational background, grade point average, or other qualifications.
 - c. For formal admission requirements and procedures, students should contact the department offering the certificate program.
2. The student must apply to the certificate program prior to completing the second course in the program.
 - a. Completing the certification program coursework without proper admission to the program could jeopardize future enrollment opportunities in certificate program courses or the recognition of the completion of the certificate program by the university.
 - b. Once the student has been admitted to the certificate program, the department will notify the Registrar's Office so it is reflected on the student's official academic record.
 - c. Once the student has completed the last course required for the certificate program, the department will notify the Registrar's Office and the certificate will be posted to the student's official transcript.

In the event that the student completes a degree program prior to completing the requirements for the certificate, the student would be required to be readmitted as a degree seeking or non-degree seeking student to complete the certificate program.

Note: Students completing an undergraduate degree may not enter a graduate certificate program unless they are also admitted as a degree-seeking graduate student or post-baccalaureate non-degree student.

Master's Degree Programs

Degrees Offered

The University confers at the master's level the Juris Master (JM), Master of Law Letters (LLM), Master of Arts (MA), Master of Science (MS), Master of Accounting (MAcc), Master of Business Administration (MBA), Master of Engineering (MEng), Master of Fine Arts (MFA), Master of Music (MM), Master of Music Education (MME), Master of Public Administration (MPA), Master of Public Health (MPH), Master of Science in Planning (MSP), Master of Social Work (MSW), Specialist in Education (EdS), Professional Science Master (PSM), and Specialist (SPE) degrees.

The minimum requirements stated below govern all of these degrees except the EdS, the PSM, the SPE, and the MFA degrees. Individual departments may have additional or specific requirements over and above those stated here. Consult the appropriate departmental section of this *Graduate Bulletin* for details.

Types of Programs

There are three types of programs by which a student may secure a master's degree: thesis, coursework-only, and project. It is optional with any department whether it requires all majors to proceed under one or the other type, or whether it permits individual students to choose between them. For specific information, consult the appropriate departmental section of this *Graduate Bulletin*.

Thesis-Type Master's Program. A thesis-type master's program is focused on research and scholarship, culminating in written output in the form of the thesis. Thesis-type programs usually include graduate coursework in specific content areas, research methods, analysis, and theory. The scope of the thesis is discipline-specific and typically requires more than one semester of intensive work. A thesis clearly exceeds the requirements of a typical course paper and follows the traditional model of academic, publishable work (i.e., consists predominantly of written work). The thesis must present original research conducted by the student under the close supervision of the student's faculty supervisory committee.

To qualify for a master's degree under a thesis program, the student must complete a minimum of thirty semester hours of credit including thesis credit. At least eighteen of these hours must be taken on a letter-grade basis (A, B, C). The minimum number of thesis hours for completion of a master's degree shall be six hours.

Theses can only be completed by students in a thesis-type program and require two course codes: one for thesis credit hours and one for thesis defense. Graduate students pursuing a thesis-type program must adhere to all committee composition requirements set by the university and their academic unit. Additionally, students in a thesis-type program must electronically submit their manuscript to The Graduate School for format review and adhere to all manuscript clearance deadlines.

Coursework-Only Program. A coursework-only master's program may include capstone options such as comprehensive exams, graduate-level internships, or cumulative projects (written or creative). Coursework-only programs are not required to include one of these capstone options by the university. These capstone options exceed the scope of a typical course assignment but are smaller in scope than master's thesis or project-track. Typically, capstone experiences are completed at the end of the program under the supervision of one faculty member while students are registered for a capstone-type course. Each unit may choose its own nomenclature for the capstone option (including but not limited to: "capstone," "capstone project," "capstone experience," or "comprehensive project"), as long as the terminology does not include the word "thesis" and is distinct from terminology chosen for the project programs within that unit.

To qualify for a coursework-only master's degree, the student must complete a minimum of thirty semester hours of credit. At least twenty-one of these hours must be taken on a letter-grade basis (A, B, C). In a coursework-only master's program, graduate students complete a degree broadly sampling discipline-specific and/or interdisciplinary content courses, theories, and methods.

Capstone options can only be completed by students in a coursework-only program and require one course code for the course during which the capstone experience is completed. The capstone option may take any format and students are not required to submit evidence of the completed work to The Graduate School, only to their unit. Any capstone option is subject to unit requirements, but not subject to university rules regarding committee composition, manuscript formatting, or manuscript deadlines.

Project Master's Program.

A project master's program is primarily focused on creative achievement and activity culminating in a terminal project distinguished by its predominantly non-written output. While project master's programs include graduate coursework in specific content areas, the emphasis is on applied and/or creative activity, interpretation, and theory. The project in a project master's program does not follow the traditional model of academic, publishable work and does not need to be limited to writing. There may or may not be a written component included in the project (e.g., students may do both a performance and written assignment), but the majority of the work should be in a format other than written. The project may take a variety of specialized interactive formats, including but not limited to: audio/digital (e.g., film, video, photography, or static image), performance (e.g., dance, theater, music), or art (e.g., exhibit). The scope of the project is discipline-specific and typically requires more than one semester of intensive work and exceeds the requirements for a typical course project/assignment. The project must present an original artistic and/or professional endeavor produced by the student under the close supervision of the student's faculty supervisory committee. Each unit may choose its own nomenclature for the project (including but not limited to: "creative project," etc.), as long as the terminology does not include the word "thesis" and is distinct from terminology chosen for the coursework-only program within that unit.

To qualify for a master's degree in a project program, the student must complete a minimum of thirty semester hours of credit. At least twenty-one of these hours must be taken on a letter-grade basis (A, B, C). The minimum number of project hours for completion of a project master's program shall be six hours.

Projects in lieu of thesis being completed by students in a project master's program require two course codes: one for project credit hours (or unit-specific nomenclature) and one for project defense (or unit-specific nomenclature). Additionally, graduate students completing a project master's program are required to submit a record of their output (e.g., copy of digital file, photographs of an exhibit, footage from a performance, etc.) to The Graduate School in electronic format for storing and cataloging.

Requirements at the Master's Level

At the master's level students are expected to demonstrate an understanding and make sense of the core knowledge needed to function in their professional

field. Master's level students are expected to demonstrate an understanding of the research process, and/or creative or problem-solving activity or application of the knowledge appropriate to their discipline. The student is held responsible for meeting the requirements listed below.

Standardized (Advanced and Achievement) Tests

Certain departments require the area or advanced tests of the Graduate Record Examinations (GRE) or other standardized achievement tests. These tests should be taken no later than during the first term of residence in graduate study. Consult the chair of the major department for details.

Transfer Credit

Transfer of graduate courses not counted toward a previous degree from another nationally accredited U.S. graduate school (or comparable international institution) is limited to six semester hours, and transfer of graduate courses not counted toward a previous degree within Florida State University is limited to twelve semester hours, except when the departmental course requirement exceeds the thirty hour University-wide minimum requirement. In the latter case, additional transfer credit may be allowed to the extent of the additional required hours. In all cases, the majority of credit must be earned through Florida State University or its official consortial institutions. All transfer credit must: 1) be recommended by the major department; 2) be evaluated as graduate work by the Records Audit and Analysis in the Office of the University Registrar at Florida State University; and 3) have been completed with grades of 3.0 ("B") or better.

Grades earned at another institution cannot be used to improve a grade point average or eliminate a quality point deficiency at Florida State University.

The University does not accept experiential learning or award credit for experiential learning. Transfer credit based on experiential learning from another institution will not be accepted.

General Course Requirements

The distribution of hours among 4000-, 5000-, and 6000- level courses and above is determined by the college or school of the student's major department. Only courses numbered 5000 and above are normally to be taken by graduate students. A graduate student's directive committee or department may, however, permit the student to take specified 4000 level courses in the degree program. Such 4000 level courses may be credited toward a graduate degree but cannot count in a student's minimum thirty total semester hours of graduate credit or graduate GPA.

Language Requirements

There is no University-wide foreign language requirement for the master's degree, except for the Master of Arts (MA) degree. Each department sets its own language requirements.

Residence Requirements

There is no University-wide residence requirement for the master's degree beyond that implicit in the limitation upon transfer credit, the recency of work requirement, and the full-time student load requirement. Master's candidates are advised that some programs and departments may impose a stricter rule as required by the specific program of study.

Recency of Work

The work for the master's degree must be completed within seven years from the time the student first registers for graduate credit. Any graduate work transferred from another institution must have commenced not more than seven years prior to completion of the degree for the credits to be applicable to the master's degree. If the master's degree is not completed within seven years from the time the student first registers for graduate credit, and the program and/or Department Chair does not choose to approve an Extension of Time (EOT), then the student may no longer be enrolled in that program or at Florida State University.

Program of Study

As early as possible during the first term of graduate work, students should prepare a program of courses with the help of their major professor or supervisory committee. This program must be approved by the major professor and the chair of the major department. A copy of the approved program is to be kept on file in the department.

Major Professors

At the earliest opportunity, the student should follow the convention of the major department or college to identify the major professor, who will serve as the student's advisor and supervisor. If nine or more semester hours of work are taken in any department other than the major one, these hours may be considered a minor if so desired by the student and by the major department. Designation of the major professor requires the mutual consent of the student, department chair, and professor involved.

Supervisory Committee

A master's degree supervisory committee must be designated for all thesis students and may be designated for non-thesis or project master's students at the option of the department. The supervisory committee must consist of a minimum of three members of the faculty who have Graduate Faculty Status, one of whom is designated as the major professor. All additional members of the committee must hold Graduate Faculty Status or (in the case of specialized or non-tenure track faculty) co-doctoral or co-master's Directive Status. Under special circumstances, persons external to the University may be appointed as Courtesy Faculty with co-doctoral or co-master's Directive Status and serve on a student's supervisory committee as an additional member or co-chair. The department or college must enter the composition of the supervisory committee into the online Graduate Student Tracking system in a timely manner, but no later than the second week of classes in the semester that the student intends to defend. Only official members of the supervisory committee (i.e., those listed on a student's committee in the Graduate Student Tracking/GST database) may vote and sign the online Manuscript Signature Form indicating approval of the thesis.

A supervisory committee's judgments on the quality of a student's thesis or dissertation should be independent, unbiased, and based solely on the academic merits of the work before them. Any other standard risks a breach of professional ethics or law and undermines the integrity of the process and those involved. Any personal, professional, or financial relationships (e.g. involving the major professor, supervisory committee members, and/or student) that may create the perception of bias in that process must be avoided. Immediate family members, domestic partners and married couples are restricted from serving together on the same supervisory committee in any capacity as this could potentially lead to a perception of bias. For the purposes of this policy, immediate family members are defined as a parent, grandparent, spouse, sibling, child or grandchild by blood, adoption or marriage. Exception requests for extenuating circumstances can be submitted by the unit's academic dean to the Dean of The Graduate School for consideration. However, for doctoral supervisory committees, under no circumstances can a Committee Chair (or Co-Chair) and University Representative be immediate family members, domestic partners, or a married couple. The University Representative must be drawn from outside the student's department (as well as outside the student's degree program for interdisciplinary programs) must be a fully-tenured member of the faculty with Graduate Faculty Status (GFS) and should be free of conflicts of interest with other members of the supervisory committee. Financial conflicts of interest would not include the typical practice of hiring a student on a university assistantship in the home unit but would include the student being hired by the major professor's private company.

If any such conflict of interest exists, it should be reported by the department chair to the academic dean's office of the student's academic unit, who will evaluate the situation for potential harm and take appropriate action. If questions or irregularities arise that cannot be resolved within the academic unit, the dean's office should contact the Dean of The Graduate School or designee for resolution by submitting an exception request to The Graduate School.

Prospectus

A thesis-type program may require preparation and submission of a prospectus to the student's major professor, supervisory committee, and departmental chair for approval. Students are reminded to seek Institutional Review Board (IRB) and/or Animal Care and Use Committee (IACUC) approval prior to commencing any research involving human or animal subjects. The student's name must appear on the IRB approval and/or application form as a PI or associate/co-investigator for the period of time when the student's research was conducted. Students must be listed on an ACUC protocol in order to conduct any animal research. Failure to be listed or obtain the required approvals may result in the thesis being permanently embargoed and unpublizable in any form, and the student may not be allowed to graduate.

Thesis

The subject of the thesis must be within the major field and must reveal independent investigation and knowledge of the methods of scholarship. It is the responsibility of the major professor to supervise the preparation of the prospectus and the thesis. The manuscript must be prepared according to the style and form prescribed by the department and must conform to the University requirements regarding format.

A student who enrolls in thesis hours need not be enrolled continuously thereafter in thesis hours if they meet the minimum University requirement for full-time or part-time enrollment through other coursework. A student must be enrolled in a minimum of two thesis hours in the semester of graduation. The minimum number of thesis hours required for the master's degree is six. Those with underload permission must register for at least two credit hours of thesis per semester. Underloads must be approved by the student's academic

dean. Before registering for thesis hours, the student must consult the major professor as to the proportion of time to be devoted to thesis work. **For thesis-seeking master's students, after completion of the required coursework and six credit hours of thesis, master's students must be enrolled for a minimum of three credit hours per semester (of which at least two must be thesis hours) until completion of the degree.**

Before writing the thesis, the student should become familiar with the University's manuscript formatting and clearance requirements. The thesis should be in the hands of the major professor and the examining committee at least two weeks before the date of the oral examination. At the same time, the thesis should be submitted electronically to the Manuscript Clearance Advisor in The Graduate School so that the clearance advisor can provide the student with a critique of the manuscript with respect to The Graduate School's formatting requirements. Electronic submission instructions can be found on The Graduate School's website under Thesis, Treatise and Dissertation.

At least two weeks prior to the date of the examination, the student will submit an announcement of the thesis title, date, and place of the examination to The Graduate School. The announcement must be submitted electronically on The Graduate School's Manuscript Clearance Portal and will be posted on the Defense Calendar on The Graduate School's Web site. Electronic submission instructions can be found on The Graduate School's website under Thesis, Treatise, and Dissertation.

After approval by the oral examining committee, which includes or may be the same as the supervisory committee, the student should electronically submit the final version of the thesis to the Manuscript Clearance Advisor. The post-defense, final content-approved version of the thesis must be submitted electronically to the Manuscript Clearance Advisor in The Graduate School within sixty days of the defense date or by the semester deadline (whichever is earliest). If the appropriate deadline is missed, the student must be re-examined. Consult the *Registration Guide* for the manuscript submittal and forms deadline dates.

As a condition of undertaking a thesis master's program, the student agrees that the completed thesis will be archived in the University Libraries system. The student will make the electronic thesis available for review by other scholars and the general public by selecting an access condition provided by The Graduate School. The electronic thesis also will be archived by ProQuest; the student will select an access condition that concurs with the access condition in the University Libraries system. If the student wishes ProQuest to register the copyright, an additional fee must be paid.

Publication of the thesis through standard media for scholarly work is encouraged.

Examination in Defense of Thesis

The defense of the thesis will be oral. Responsibility for suggesting the time, designating the place, and presiding at the examination rests with the major professor. It is recommended that students defend no later than the eighth week of classes in the semester of intent to graduate. Students must meet all manuscript and online forms deadlines set by The Graduate School in the semester of graduation. Consult the *Registration Guide* for the manuscript submittal and online forms deadline dates.

Academic courtesy requires that the thesis be submitted to each member of the supervisory committee at least two weeks before the date of the oral examination. At the same time, the thesis should be submitted electronically to the Manuscript Clearance Advisor in The Graduate School so that the clearance advisor can provide the student with a critique of the manuscript with respect to The Graduate School's formatting requirements.

The supervisory committee, the chair of the major department, and such other members of the faculty as may be appointed by the academic dean will conduct the examination. All members of the graduate faculty are invited to attend. At least two weeks prior to the date of the examination, the student will submit an announcement of the thesis title, date, and place of the examination to The Graduate School. The announcement must be submitted electronically on The Graduate School's Manuscript Clearance Portal and will be posted on the Defense Calendar on The Graduate School's Web site. Electronic submission instructions can be found on The Graduate School's Web site under Thesis, Treatise, and Dissertation.

All committee members and the student must attend the entire defense in real time, either by being physically present or participating via distance technology. Individual departments may impose stricter requirements on physical attendance, e.g. all members must be physically present. Departments and other degree-granting programs must publicize their policy on defense attendance in their Graduate Student Handbook and in the relevant section of the *Graduate Bulletin*. If exceptional emergency circumstances, e.g. medical or other emergency situations, prevent the participation of a committee member, then it may be necessary to arrange for an additional appropriately qualified colleague to attend the defense. A minimum of three members with Graduate Faculty Status must participate.

The oral examining committee will certify the results of the examination: passed, failed, or to be reexamined. The report of results following a re-examination must indicate the student either passed or failed. To receive a passing grade, the written thesis must be in the final form or require only minor revisions at the time of the defense. A grade of PASS for the defense of thesis requires at least a majority approval of the committee. Individual departments may impose stricter requirements for what constitutes a grade of PASS. Departments and other degree-granting programs must publicize their policy on this issue in their Graduate Student Handbook and in the relevant section of the *Graduate Bulletin*. If the student passes, each member must sign the online Manuscript Signature Form to substantiate the results of the defense. The degree cannot be awarded until the required forms have been completed on The Graduate School's Manuscript Clearance Portal and the final version of the manuscript has been submitted to and approved by the Manuscript Clearance Advisor.

After approval by the oral examining committee and completion of the Final Content Approval Form by their major professor(s), the student should electronically submit the final content-approved version of the thesis to the Manuscript Clearance Advisor. Electronic submission instructions can be found on The Graduate School's website under Thesis, Treatise and Dissertation. The post-defense, final content-approved version of the thesis must be submitted to the Manuscript Clearance Advisor in The Graduate School within sixty days after the defense date or by the semester deadline (whichever is earliest). If the appropriate deadline is missed, the student must be re-examined. Consult the *Registration Guide* for the manuscript submission and forms deadline dates.

Comprehensive Examination

A comprehensive or other type examination, either written, oral, or both, at the option of the department, may be required for the master's degree. Testing requirements and procedures are established by the major department.

Additional Master of Arts (MA) Requirements

In addition to the requirements listed above, candidates for the Master of Arts (MA) degree must meet the following requirements:

- Proficiency in a foreign language demonstrated by certification by the appropriate language department, or completion of twelve semester hours in a foreign language with an average grade of at least 3.0 ("B"), or four years of a single language in high school.
- Six or more semester hours of graduate credit in one or more of the following fields: art; classical language, literature, and civilization; communication (not to include speech correction); English; history; humanities; modern languages and linguistics; music; philosophy; religion; and theatre.

Doctoral Degree Programs

Degrees Offered

The University offers the Doctor of Philosophy (PhD), Doctor of Education (EdD), Doctor of Music (DM), and Doctor of Nursing Practice (DNP) with degrees in several departments of the College of Arts and Sciences, College of Business, College of Communication and Information, College of Criminology and Criminal Justice, College of Education, FAMU-FSU College of Engineering, College of Fine Arts, College of Human Sciences, College of Music, College of Nursing, College of Social Sciences and Public Policy, College of Social Work, as well as in several interdepartmental and interdivisional areas. See relevant sections of this *Graduate Bulletin*.

Requirements of the Doctor of Philosophy (PhD) Degree

The student is held responsible for meeting the requirements listed below.

The PhD is a research degree designed to produce the critical scholar. The degree is granted only to students who: 1) have mastered definite fields of knowledge so that they are familiar not only with what has been accomplished in their specific fields but also with the potential and opportunity for further advances; 2) have demonstrated the capacity to do original and independent scholarly investigation or creative work in their selected fields; and 3) have the ability to integrate their selected fields of specialization with the larger domains of knowledge and understanding.

Admission

Admission in the formal sense is governed by the same minimum standards as stated in the "Admissions" chapter of this *Graduate Bulletin*. However, a special effort is made by the departments to select and to admit only those who appear clearly qualified for studies at this advanced graduate level.

Diagnostic Examination

The student who has been admitted to work toward the doctoral degree may, before the end of the second semester of post-baccalaureate study, be required to take a departmentally administered diagnostic examination. It will be designed to appraise the student's ability to pursue the PhD degree in the field and to facilitate counseling in the development of the student's program of study.

The department will notify the Office of the University Registrar if the diagnostic examination is failed and the student's program is to be terminated.

Scholarly Engagement

The purpose of the Scholarly Engagement requirement is to ensure that doctoral students are active participants in the scholarly community. To meet the Scholarly Engagement requirement, doctoral students should interact with faculty and peers in ways that may include enrolling in courses; attending seminars, symposia, and conferences; engaging in collaborative study and research beyond the university campus; and utilizing the library, laboratories, and other facilities provided by the University. The goal is to prepare students to be scholars who can independently acquire, evaluate, and extend knowledge, as well as develop themselves as effective communicators and disseminators of knowledge. Each academic unit with a doctoral program should include a program specific statement in its Graduate Handbook describing how its students can meet the Scholarly Engagement requirement.

Transfer Credit

Transfer of graduate courses not counted toward a previous degree from another nationally accredited graduate school (or comparable international institution) is limited to six semester hours and transfer of graduate courses not counted toward a previous degree within Florida State University is limited to twelve semester hours, except when the departmental course requirement exceeds the thirty hour University-wide minimum requirement. In the latter case, additional transfer credit may be allowed to the extent of the additional required hours. In all cases, the majority of credit must be earned through Florida State University or its official consortial institutions. All transfer credit must: 1) be recommended by the major department; 2) be evaluated as graduate work by the Records Audit and Analysis in the Office of the University Registrar at Florida State University; and 3) have been completed with grades of 3.0 ("B") or better.

Grades earned at another institution cannot be used to improve a grade point average or eliminate a quality point deficiency at Florida State University.

The University does not accept experiential learning or award credit for experiential learning. Transfer credit based on experiential learning from another institution will not be accepted.

Course Requirements

The PhD degree represents the attainment of independent and comprehensive scholarship in a selected field rather than the earning of a specific amount of credit. Individual programs are planned to increase the likelihood that prior to students reaching the preliminary examinations they will have gained sufficient mastery of their field to complete them successfully. Prior to degree conferral, all doctoral students must have completed a minimum of twenty-four credit hours of dissertation.

Major Professor

Early in the doctoral program, the student should consult with the professors under whom the student may be interested in working and from whose areas of competency a dissertation topic could be selected. The student should request that the selected faculty member serve as major professor. The departmental chair will approve the major professor who must be a member of the faculty with Graduate Faculty Status (GFS) and have special competence in the student's proposed area of concentration. The appointment must be mutually agreeable to the student, major professor, and departmental chair.

Supervisory Committee

Upon the request of the major professor, the departmental chair will appoint the supervisory committee that will be in charge of the work of the student until the completion of all requirements for the degree. The supervisory committee will consist of a minimum of four members of the faculty who have Graduate Faculty Status, one of whom is the university representative of the faculty. Programs may establish a more stringent policy on supervisory committee membership, but such policies may not conflict with the University policy. For example, a program may choose to stipulate that more than the minimum number of committee members hold Graduate Faculty Status in the program or must be members of the tenure-track faculty. If deemed desirable and not established by policy, it may also be appropriate to include additional members to provide necessary expertise. All additional members of the committee must hold Graduate Faculty Status or (in the case of specialized or non-tenure track faculty) co-doctoral or co-master's Directive Status. Under

special circumstances persons external to the University may be appointed as Courtesy Faculty with co-doctoral or co-master's Directive Status and serve on a student's supervisory committee as either an additional member or co-chair. The department or college must enter the composition of the supervisory committee into the online Graduate Student Tracking system in a timely manner, but no later than the second week of classes in the semester that the student intends to defend. **Each year, the supervisory committee, the major professor, or the student's advisor prior to selection of a major professor will assess the progress of the student in writing and will make available copies of the annual review to the student, the departmental chair, and the academic dean.** The Dean of The Graduate School, the academic dean, and the chair of the major department may attend committee meetings as non-voting members. Only official members of the supervisory committee (i.e., those listed on a student's committee in the Graduate Student Tracking/GST database) may vote and sign the online Manuscript Signature Form indicating approval of the dissertation.

A supervisory committee's judgments on the quality of a student's thesis or dissertation should be independent, unbiased, and based solely on the academic merits of the work before them. Any other standard risks a breach of professional ethics or law and undermines the integrity of the process and those involved. Any personal, professional, or financial relationships (e.g. involving the major professor, supervisory committee members, and/or student) that may create the perception of bias in that process must be avoided. Immediate family members, domestic partners and married couples are restricted from serving together on the same supervisory committee in any capacity as this could potentially lead to a perception of bias. For the purposes of this policy, immediate family members are defined as a parent, grandparent, spouse, sibling, child or grandchild by blood, adoption or marriage. Exception requests for extenuating circumstances can be submitted by the unit's academic dean to the Dean of The Graduate School for consideration. However, for doctoral supervisory committees, under no circumstances can a Committee Chair (or Co-Chair) and University Representative be immediate family members, domestic partners, or a married couple. The University Representative must be drawn from outside the student's department (as well as outside the student's degree program for interdisciplinary programs) must be a fully-tenured member of the faculty with Graduate Faculty Status (GFS) and should be free of conflicts of interest with other members of the supervisory committee. Financial conflicts of interest would not include the typical practice of hiring a student on a university assistantship in the home unit but would include the student being hired by the major professor's private company.

If any such conflict of interest exists, it should be reported by the department chair to the academic dean's office of the student's academic unit, who will evaluate the situation for potential harm and take appropriate action. If questions or irregularities arise that cannot be resolved within the academic unit, the dean's office should contact the Dean of The Graduate School or designee for resolution by submitting an exception request to The Graduate School.

University Representative

The University representative is drawn from outside the student's department, as well as outside the student's degree program for interdisciplinary programs. The University representative must be a tenured member of the faculty with Graduate Faculty status and should be free of conflicts of interest with other members of the supervisory committee (see above Supervisory Committee Section). The University representative is responsible for ensuring that the student is treated fairly and equitably in accordance with University, College, and Departmental guidelines and policies, and that decisions made by the supervisory committee reflect the collective judgment of the committee. This responsibility begins with appointment to the supervisory committee and ends with the defense of the dissertation. The University representative should verify that the defense is conducted appropriately, and then submit the online Defense Report to The Graduate School's Manuscript Clearance Portal within one week of the defense. Content knowledge in the subject of the dissertation is valuable for the University representative, but not required. In addition, the University representative represents the University's interest and is responsible for ensuring that our doctoral graduates are of high quality. If questions or irregularities arise that cannot be resolved within the college, the University representative should contact the Dean of The Graduate School for resolution.

Program of Study

As soon as possible, the student, under the supervision of a designated advisor or major professor, should prepare and receive approval of a plan of courses to be taken. This Program of Study must be signed by the faculty advisor or major professor and the chair of the major department. A copy of the student's approved Program of Study is to be kept on file in the department.

At the time of the annual review, changes to the plan should be noted and approved. Once designated, the supervisory committee should be included as part of the approval process for any changes to the Program of Study.

Language and Statistical Analysis Requirements

There are no University-wide foreign language, statistics, or other tool requirements for the PhD degree. Each department prescribes its own requirements.

The procedures for testing foreign language proficiency are set by the department prescribing the requirements. The Department of Classics prepares and administers the examinations in Greek and Latin. For departments allowing foreign students to use English in satisfaction of language requirements but unwilling to accept satisfactory completion of their departmental courses as sufficient demonstration of language competency, the University's Office of Assessment Services will administer the Educational Testing Services Test of English as a Foreign Language (TOEFL) which certifies comparative attainment. Foreign students deficient in English may be referred to the Center for Intensive English Studies. The completion of that coursework may be accepted as an indication of competency. Examinations for other approved languages are prepared and administered by the Department of Modern Languages and Linguistics.

The language courses numbered 5060 are service courses designed to prepare the student for the language exemption examinations. The student may take these courses as many times as needed. Students will use the 5069 courses to register for the examination.

These instruments afford means of continuing access to the materials and literature of research; therefore, the candidate should acquire competency in them early in the doctoral program.

Preliminary Examination

Satisfactory completion of a preliminary examination shall be required for admission to candidacy for the PhD degree. No student may register for dissertation hours prior to the point in the semester in which the preliminary examination was passed. An admission to candidacy form must be completed and filed in the Office of the University Registrar prior to registration for dissertation hours. After completion of the admission to candidacy process, the student may retroactively add dissertation hours for that semester in which the preliminary examination was completed. Retroactive changes are only permitted if the preliminary examination is passed by the end of the seventh week of the semester. For term specific deadline dates, please refer to the "Academic Calendar" in the *Registration Guide*.

The preliminary examination is designed to test scholarly competence and knowledge and to afford the examiners the basis for constructive recommendations concerning the student's subsequent formal or informal study. The form and content of this examination will be determined by the department, college, school, or examining committee (typically, but not necessarily the same composition as the supervisory committee) administering the degree program. Prior to the examination, the student's examining committee will determine whether the student 1) has a 3.0 average, and 2) has progressed sufficiently in the study of the discipline and its research tools to begin independent research in the area of the proposed dissertation.

The chair of the major department, the academic dean, and the Dean of The Graduate School may attend any session of the supervisory or examining committee as nonvoting members. A member may be appointed to the examining committee at the discretion of the academic dean or Dean of The Graduate School or on recommendation of the major professor. Normally, the examining committee will be identical with the supervisory committee.

The examining committee will report the outcome of the examination to the academic dean: passed, failed, additional work to be completed, or to be re-examined; the report following the reexamination must indicate the student either passed or failed. The results of the examination will be reported to the Office of the University Registrar for inclusion in the student's permanent record.

If a student fails the preliminary examination prior to admission to candidacy, a re-examination may be requested, but it must be recommended by the student's supervisory committee and approved by the Academic Dean's Office. Students can take the preliminary examination for admission to candidacy only two times. At least one semester of additional preparation is needed before the re-examination. A second failure on the preliminary exam makes the student ineligible to continue in the degree program.

Time Limit for Completion of Degree Requirements

All requirements for the doctoral degree must be completed within five calendar years from the time the student passes the preliminary examination and is admitted to candidacy. If the student's major professor and/or Department Chair does not choose to either approve an Extension of Time (EOT) or re-

quire the student to take the preliminary exam and/or coursework again for readmission to candidacy, then the student may no longer be enrolled in that program or at Florida State University.

Admission to Candidacy

A student who has passed the preliminary examination and has been certified by the Office of the University Registrar (with an admission to candidacy form) is considered a candidate for the doctoral degree and is eligible to register for dissertation credits.

A student must be admitted to candidacy at least six months prior to the granting of the degree. The purpose of this requirement is to ensure a minimal lapse of time for effective work on the dissertation after acquisition of the basic competence and after delineation of the problem and method of attack. More realistically, the student should expect to spend a year or more of work on the dissertation.

Prospectus

After passing the preliminary examination, the student may be required by the department to submit to the major professor, supervisory committee, and departmental chair a prospectus on a research project suitable for a doctoral dissertation. Students are reminded to seek Institutional Review Board (IRB) and/or Animal Care and Use Committee (IACUC) approval prior to commencing any research involving human or animal subjects. The student's name must appear on the IRB approval and/or application form as a PI or associate/co-investigator for the period of time when the student's research was conducted (i.e., data collections and analyses). Students must be listed on an ACUC protocol in order to conduct any animal research. Failure to be listed or obtain the required approvals may result in the dissertation being permanently embargoed and unpublishable in any form.

Dissertation

A dissertation must be completed on some topic connected with the major field of study. To be acceptable it must be an achievement in original research constituting a significant contribution to knowledge and represent a substantial scholarly effort on the part of the student.

It is the responsibility of the major professor to supervise the preparation of the prospectus and the dissertation. The manuscript must be prepared according to the style and form prescribed by the department and must conform to the University requirements regarding format. Before writing the dissertation, the student should become familiar with the University's manuscript formatting and clearance requirements. The dissertation should be in the hands of the major professor and the examining committee at least four weeks before the date of the oral examination. At the same time, the dissertation should be submitted electronically to the Manuscript Clearance Advisor in The Graduate School so that the clearance advisor can provide the student with a critique of the manuscript with respect to the Graduate School's formatting requirements. Electronic submission instructions can be found on The Graduate School's website under Thesis, Treatise and Dissertation.

A student who has completed the required coursework, passed the Preliminary Examination and submitted an Admission to Candidacy form to the Office of the Registrar, and continues to use campus facilities and/or receives faculty supervision, but **has not been cleared by the Manuscript Clearance office** shall include in the required full-time load a minimum of two credit hours of dissertation per semester, including Summer term, until completion of the degree. A student must be enrolled in a minimum of two hours of dissertation in the semester of graduation. Those with underload permission must register for at least two credit hours of dissertation per semester (or term). Underloads must be approved by the student's academic dean. Before registering for dissertation hours, the student must consult the major professor as to the proportion of time to be devoted to dissertation work.

Prior to degree conferral, all doctoral students must have completed a minimum of twenty-four credit hours of dissertation. **Doctoral students, after completion of the preliminary exam and twenty-four credit hours of dissertation, must be enrolled for a minimum of three credit hours per semester (of which at least two must be dissertation hours) until completion of the degree.** For more information on the full-time load for doctoral students, see the "Student Course Load" section of this *Graduate Bulletin*.

For more specific information on final-semester registration, see the section "Registration for Final Term."

As a condition of undertaking a dissertation program, the student agrees that the completed dissertation will be archived in the University Libraries system. The student will make the electronic dissertation available for review by other scholars and the general public by selecting an access condition provided by The Graduate School.

Examination in Defense of Dissertation

The defense of the dissertation will be oral. Responsibility for suggesting the time, designating the place, and presiding at the examination rests with

the major professor. It is recommended that students defend no later than the eighth week of classes in the semester of intent to graduate. Students must meet all manuscript and online forms deadlines set by The Graduate School in the semester of graduation. Consult the *Registration Guide* for the manuscript submittal and online forms deadline dates.

Academic courtesy requires that the dissertation be submitted to each member of the supervisory committee at least four weeks before the date of the oral examination. At the same time, the dissertation should be submitted electronically to the Manuscript Clearance Advisor in The Graduate School so that the clearance advisor can provide the student with a critique of the manuscript with respect to The Graduate School's formatting requirements. Electronic submission instructions can be found on The Graduate School's website under Thesis, Treatise and Dissertation.

The supervisory committee, the chair of the major department, and such other members of the faculty as may be appointed by the academic dean will conduct the examination. All members of the graduate faculty are invited to attend. At least two weeks prior to the date of the examination, the student will submit an announcement of the dissertation title, date, and place of the examination to The Graduate School. The announcement must be submitted electronically on The Graduate School's Manuscript Clearance Portal and will be posted on the Defense Calendar on The Graduate School's Web site. Electronic submission instructions can be found on The Graduate School's Web site under Thesis, Treatise, and Dissertation.

All committee members and the student must attend the entire defense in real time, either by being physically present or participating via distance technology. Individual departments may impose stricter requirements on physical attendance, e.g., all members must be physically present. Departments and other degree-granting programs must publicize their policy on defense attendance in their Graduate Student Handbook and in the relevant section of the *Graduate Bulletin*. If exceptional emergency circumstances, e.g. medical or other emergency situations, prevent the participation of a committee member, then it may be necessary to arrange for an additional appropriately qualified colleague to attend the defense. If the University representative is unable to attend in real-time, then a new, appropriately qualified University representative must be selected to attend the defense. A minimum of four members with Graduate Faculty Status must participate.

The oral examining committee will certify the results of the examination: passed, failed, or to be reexamined. The report of results following a re-examination must indicate the student either passed or failed. To receive a passing grade, the written dissertation must be in final form or require only minor revisions at the time of the defense. A grade of PASS for the defense of dissertation requires at least a majority approval of the committee. Individual departments may impose stricter requirements for what constitutes a grade of PASS. Departments and other degree-granting programs must publicize their policy on this issue in their Graduate Student Handbook and in the relevant section of the *Graduate Bulletin*. If the student passes, each member must sign the online Manuscript Signature Form to substantiate the results of the defense. A written critique of the conduct of the examination in defense of the dissertation should be submitted by the University representative from the graduate faculty to The Graduate School's Manuscript Clearance Portal within one week after the date of defense.

After approval by the oral examining committee and completion of the Final Content Approval Form by their major professor(s), the student should electronically submit the final content-approved version of the dissertation to the Manuscript Clearance Advisor. Electronic submission instructions can be found on The Graduate School's Web site under Thesis, Treatise, and Dissertation. The post-defense, final content-approved version of the dissertation must be submitted to the Manuscript Clearance Advisor in The Graduate School within sixty days after the defense date or by the semester deadline (whichever is earliest). If the appropriate deadline is missed, the student must be re-examined. Consult the *Registration Guide* for the manuscript submission and forms deadline dates.

Publication of Dissertation

As a condition of undertaking a PhD program, the student agrees that the completed dissertation will be archived in the University Libraries system. The student will make the electronic dissertation available for review by other scholars and the general public by selecting an access condition provided by The Graduate School. The electronic dissertation will also be archived by ProQuest; the student will select an access condition that concurs with the access condition in the University Libraries system.

Publication of the dissertation through standard media for scholarly work is encouraged.

Guidelines for Restrictions on the Release of Theses, Dissertations, and Treatises

The free and open dissemination of the results of research conducted at Florida State University is required if the University is to contribute effectively to the education of its students and to the body of human knowledge. Conflicts can develop among the interests of research sponsors, research directors, and the students doing the research. To ensure that the interests of all parties are protected, the following guidelines should be observed.

Electronic Theses and Dissertations (ETDs) as well as treatises must be made available in their complete and original format. They cannot be subdivided into chapters and disseminated under different distribution options.

Worldwide Access. Recommended to all of our students. This option makes the ETD freely available worldwide via the FSU ETD Digital Library Repository. It should be noted that some publishers may see a conflict with this level of distribution prior to publication.

Embargoed Access (*Twenty-four Months*). Recommended to students who have a patent application in process or who want to restrict access to the ETD for a limited amount of time in order to pursue commercial interests or other publication. After the restricted time period, the document will be made freely available through worldwide access (option above).

The maximum delay in the release of a thesis, treatise, or dissertation to the FSU Digital Library Repository and ProQuest shall not exceed twenty-four months from the date the thesis, treatise, or dissertation is approved by The Graduate School. In special circumstance, the Dean of The Graduate School may grant an additional delay of forty-eight months in twenty-four month increments, if the case is made that the delay is in the best interest of all parties or if publication or commercial interest in the document is still ongoing. Such a request must be submitted at least one month prior to the expiration of the original period of delay.

A request for such a delay must be submitted to the Manuscript Clearance Portal by completing the Embargo Request section of the Manuscript Access Agreement Form. This request must be approved in the Manuscript Clearance Portal by the major professor (or co-major professors, if applicable), the Manuscript Clearance Advisor, and the Dean of The Graduate School. The department or program chair, or dean of the relevant college may endorse the request if the major professor is retired, deceased, etc.

It should be recognized that adherence to this policy does not constitute a guarantee that information in the sequestered thesis, treatise, or dissertation will not be disseminated by means other than the written manuscript.

Information about particular access issues related to electronic theses, treatises, and dissertations may be obtained from The Graduate School.

Note: Students should not suffer delays in their normal academic progress, including the final defense of the thesis or dissertation, as a result of a desire to delay release of the thesis or dissertation to the library.

The FSU Digital Library Repository, in cooperation with The Graduate School, may provide restricted access to ETDs at FSU (i.e., Campus Community-Only Access). Students may request that full access to their ETD be limited to people connected to FSU's network.

Please note that approval for Campus Community-Only Access is not automatic. Students must provide "reasonable justification" for their request. Also, in order to be granted Campus Community-Only Access, students must receive approval from their major professor (or co-major professors, if applicable) on the online Manuscript Access Agreement Form.

Final approval may be granted by the Dean of The Graduate School only after the online Manuscript Access Agreement Form is submitted to The Graduate School's Manuscript Clearance Portal with appropriate approvals and justification. This online form is reviewed by the Manuscript Clearance Advisor at The Graduate School before being reviewed by the Dean.

Requirements of the Doctor of Education (EdD) Degree

The EdD degree is offered by the College of Education, the College of Music, and the College of Fine Arts.

Potential candidates for this professional degree are selected on the basis of experience, skills, and goals of the students seeking admission to the programs in which the degree is offered.

Such students will ordinarily have had some years of teaching or academic administrative experience and have shown some promise of being able to develop their pedagogical or administrative skills through further research and training. The College of Education permits, as part of its experience requirement, the completion of a practicum, undertaken during the period of doctoral studies, in which the student engages in doctoral work-related activities within an external agency. Once the degree has been earned, its possessor should be able to perform the tasks of the profession with a high degree of efficiency.

The EdD degree is further distinguished from the PhD degree by the nature of specific training (although there may be a core of studies common to the two curricula) and by that of the dissertation.

The training is designed to fit the goals of individual students under the careful guidance of a supervisory committee; since the purpose of the dissertation is to provide solutions to educational problems as they arise in the field, it shall be designed to deal with methodological or administrative procedures capable of providing such solutions. Students are therefore advised that their programs must include enough methodological inquiry to establish a basis for the procedures used to arrive at their conclusions.

In light of the above, the distinction between the EdD and PhD degrees cannot be made solely on the basis of research tool requirements. Depending on the dissertation project proposed, the candidate's supervisory committee may require as much training in such research tools as statistics, foreign languages, computer languages, or other programming techniques as necessary to complete the project.

The provisions of this section indicate steps leading to the EdD degree that differ from those leading to the PhD degree.

Requirements of the Doctor of Music (DM) Degree

The DM degree is offered to a candidate who demonstrates superior ability in music as a composer or performer. A candidate is admitted on the basis of creative aptitude and professional achievement. The degree is awarded to a candidate who has achieved distinction in performance or composition and who completes relevant theoretical and historical studies.

The provisions of this section indicate steps leading to the DM degree that differ from those leading to the PhD degree. Additional information pertaining to the DM degree are noted in the "College of Music" chapter of this *Graduate Bulletin*.

Requirements of the Doctor of Nursing Practice (DNP) Degree

Please refer to the "College of Nursing" chapter of this *Graduate Bulletin* for the requirements for this degree.

Professional Degree Programs

Requirements of the Doctor of Medicine (MD) Degree

Candidates for the MD degree must:

- Be able to fully perform the essential functions in each of the following categories: observation; communication; motor, intellectual, and behavioral/social attributes as described in the College's Technical Standards for the admission and educational processes
- Successfully complete all required and elective courses and clerkships, Years One through Four
- Pass the USMLE Step 1, Step 2CK, and Step 2CS
- Complete all requirements listed in the procedure's log including CME Conference attendance, all listed procedures, ACLS, and BLS
- Complete all required surveys
- Be a "student in good standing" in the Spring semester of the Fourth Year

The Student Evaluation and Promotion Committee reviews the academic record of all fourth-year students in the Spring semester of the Fourth Year and verifies that all requirements have been met by each student. The results are submitted to the Executive Committee for consideration. The Executive Committee certifies the candidates are eligible to receive the Doctor of Medicine Degree.

For more information, please refer to the "College of Medicine" chapter of this *Graduate Bulletin*.

Transfer Credit

In rare cases a student may petition to be accepted to the College of Medicine and transfer credits from another institution. Transfer credits will be considered only for first year or second year courses. Requests for credit will be evaluated on a course-by-course basis and the College of Medicine reserves the right to determine which credits would be accepted. Transfer credit will be limited to a maximum of the equivalent of two years of coursework.

Requirements of the Juris Doctor (JD) Degree

The Juris Doctor (JD) degree is awarded by the College of Law to students who have satisfactorily completed coursework and related requirements equivalent to three academic years of full-time enrollment.

Potential candidates for this professional degree are selected on the basis of Law School Admission Test (LSAT) scores, undergraduate grades, letters

of recommendation, and goals of the students seeking admission, as communicated by personal statements. Successful completion of a bachelor's degree program at a regionally accredited institution is a prerequisite for law school admission.

The legal curriculum is designed to fit the goal of providing students with the professional skills and core knowledge necessary to engage in legal or law-related careers, while complying with standards prescribed by the American Bar Association and the Florida Bar. The first-year curriculum is comprised entirely of required courses in core subjects and the second- and third-year curricula are primarily comprised of elective courses. Apart from the first-year curriculum, graduation requirements include coursework related to professional responsibility, upper-level legal writing and skills training, as well as pro bono service.

For more information, please refer to the "College of Law" chapter of this *Graduate Bulletin*.

Transfer Credit

Students must complete a minimum of forty-five credit hours of approved course work from the Florida State University College of Law. This requirement may not be satisfied by credit earned under the auspices of another law school or through graduate-level courses at Florida State University or Florida A&M University. Generally, transfer credit is limited to the first year of Law School, the equivalent of twenty-four credit hours.

Continuance and Graduation of Master's and Doctoral Students

Academic Standards

A graduate student is not eligible for conferral of a degree unless the cumulative grade point average is at least 3.0 in formal graduate courses (5000-level or above). 4000-level courses may be credited toward a graduate degree but cannot count in a student's minimum thirty total semester hours of graduate credit or graduate GPA. No course hours with a grade below "C-" will be credited on the graduate degree; all grades in graduate courses except those for which grades of "S" or "U" are given or those conferred under the provision for repeating a course will be included in computation of the average. All conditions of admission must be met; in addition, there are usually other departmental requirements which must be met.

Faculty Academic Judgment

Master's Degree

Successful completion of coursework constituting the student's program of studies, comprehensive exam, master's project, or thesis does not guarantee continuance in a master's degree program or award of the master's degree. Faculty judgment of the academic performance of the student is inherent in the educational process in determining whether the student should continue to be enrolled or be awarded the master's degree or whether admission into a higher-level degree program is warranted.

Doctoral Degree

Successful completion of coursework constituting the student's program of studies, comprehensive exam, preliminary exams, defense of prospectus, and defense of dissertation does not guarantee continuance in a doctoral program or award of the doctoral degree. Faculty judgment of the academic performance of the student is inherent in the educational process in determining whether the student should continue to be enrolled, admitted to doctoral candidacy and the awarded the doctoral degree.

Registration for Final Term

For doctoral students and master's students in a thesis-type program, registration shall be required in the final term in which a degree requiring a thesis, dissertation, or treatise is granted, in accordance with the policies stated in the 'Thesis' and 'Dissertation' sections of this chapter.

If a non-thesis student needs only to complete the comprehensive examination in a term and did not register for the examination in the previous term, registration must be requested from the Office of the University Registrar stating the department and the name of the examination. The student must pay the "examination only" fee. If the student has not been enrolled for the previous two terms, readmission is required before registration.

Clearance for Degrees

A student should apply for graduation online at <http://my.fsu.edu> (under the "Academics" tab) in the term that the student anticipates completing the degree. The application window is available in the academic calendar for the

applicable term. If a candidate applied for graduation in a previous term but did not complete the degree, the application for graduation will be carried forward to the subsequent term.

A student's manuscript must be cleared in order to graduate; however, students also must meet departmental and University requirements before they can graduate. A manuscript is considered cleared if the Manuscript Clearance Advisor has approved the formatting of the manuscript AND all online forms have been completed in the Manuscript Clearance Portal. Students should become familiar with the University's manuscript formatting and clearance requirements before writing their thesis, dissertation, or treatise. Manuscript Clearance Workshops are also held during each semester. Workshop dates are posted to the Thesis, Treatise, and Dissertation section of The Graduate School Web site, as well as to the University's calendar of events.

All theses, dissertations, and treatises must be electronically submitted to The Graduate School via the ProQuest ETD Administrator Web site; hard copies or submissions via e-mail or any other electronic method will not be accepted. Students should submit their manuscript to The Graduate School at the same time that the manuscript is submitted to the committee prior to the defense. This initial submission is reviewed by the Manuscript Clearance Advisor, who then provides the student with a reviewed, marked-up copy of the manuscript that shows formatting corrections to be made before submitting the post-defense version of the manuscript. After the defense, students submit the final content-approved version of their manuscript, incorporating changes requested by their committee as well as those requested by the Manuscript Clearance Advisor. Students not meeting these deadlines will be considered graduates of the following semester.

Manuscript Clearance Deadlines

Students will fall under either the Semester Deadlines or the 60-Day Deadline (typically whichever is earliest).

Sixty-Day (60) Deadline. The post-defense, final content-approved manuscript and the required online forms must be electronically submitted to the Manuscript Clearance Advisor within sixty days after a successful defense. If a student defends early in the semester of graduation, or in a semester prior to graduation, the manuscript clearance deadline that applies is the 60-Day Deadline. For example, a student that defends on August 20 would have to have their manuscript cleared by October 20, even though the Fall semester clearance deadline is later in the semester. ***Additional formatting revisions are often required after the 60-Day Deadline in order for final manuscript clearance to be completed.*** The student must receive an email granting "Official Final Clearance" from the Manuscript Clearance Portal no later than one week after the 60-Day Deadline. No exceptions will be made for this policy.

Semester Deadlines. Four deadlines are posted per semester as follows:

- Last day to submit doctoral dissertation or treatise for pre-defense (initial) format review
- Last day to submit master's thesis for pre-defense (initial) format review
- Last day for submission of successfully defended, final content-approved thesis, dissertation, or treatise and completion of all required online forms
- Last day for thesis, dissertation and treatise students to receive an e-mail from Manuscript Clearance confirming final clearance

The relevant pre-defense (initial) format review deadline is the date by which students must submit their manuscript to the Manuscript Clearance Advisor for an initial formatting review. Manuscripts will not be reviewed and counted as an initial submission under the following conditions: not submitted via the ETD Web site; poorly formatted based on The Graduate School guidelines, or otherwise appears "sloppy"; sections omitted; page numbers omitted. While it is understood that content will likely change after the defense, it is expected that manuscripts submitted for the initial format review are at least 90% complete and have been formatted in full accordance with the criteria in the most recent version of The Graduate School's formatting guidelines.

The final deadline indicates the date by which students must submit the post-defense, final content-approved version of their manuscript to ProQuest ETD and ensure completion of all required manuscript clearance forms in The Graduate School's Manuscript Clearance Portal by 11:59 p.m. ET. Although students cannot complete all forms in the Manuscript Clearance Portal directly, they are ultimately responsible for ensuring their committee has completed the needed approvals. ***Please note: Additional formatting revisions are often required after this date in order for final manuscript clearance to be completed.***

Contact the Manuscript Clearance Advisor (clearance@fsu.edu) for any questions regarding the clearance process.

Policy for Awarding Degrees

Florida State University helps students meet their academic goals by monitoring academic progress toward their degree. If a graduate student has completed their respective degree requirements, the academic dean of the student's program confirms this, and the student is eligible to be awarded the degree, the University reserves the right to award the degree. Once the degree is awarded, the student must be readmitted to Florida State University in order to enroll in any courses.

Graduate students pursuing dual degrees in different disciplines must obtain formal approval of their academic dean, following established University procedures for such approvals. The student's degree program, not the major, will appear on the diploma. A list of degree programs is available in the "Academic Degree and Certificate Programs" chapter of this *Graduate Bulletin*.

Should the University invoke its prerogative to award a degree once a student has completed all stated degree requirements, the student may appeal this decision. If the student can demonstrate that continued enrollment is necessary to achieve his or her academic goals, the appeal may be granted. Reasons such as, but not limited to, desire to continue financial aid, participate in student activities, and access student services do not constitute legitimate academic reasons for appeal. The student's transcript will reflect both the degree program and the major when degrees are posted.

Any graduate student who wishes to appeal to continue enrollment, thereby postponing graduation, must submit a written request to the student's academic dean no later than ten class days after being notified that the University is invoking its right to award the degree. This appeal will be reviewed by a committee composed of the student's primary academic dean, the Dean of The Graduate School, and the University Registrar. The committee must find evidence to support the student's claim of a legitimate academic need in order to grant permission to continue taking courses.

Once a degree has been awarded, all coursework leading to that degree is considered final and not subject to change. "Incomplete" grade changes or any other grade changes should be submitted prior to the posting of the degree. Grade changes or withdrawals for coursework that applies to the awarded degree may be considered only in cases of documented University error or in cases where the courses in question are documented as applying to a degree that is still in progress.

GRADUATE FINANCIAL INFORMATION, TUITION, FEES, AID, SCHOLARSHIPS, AND EMPLOYMENT

Vice President for Finance and Administration: Kyle Clark; **Controller:** Sandy Scanlan; **Associate Controller, Office of Student Business Services:** John Bembray

General Information

Tuition and fees are collected by the Office of Student Business Services. Payment of registration fees and tuition detailed below is an integral part of the registration process.

Students with accounts owing greater than \$499.99 which are not paid by the established due date will not be permitted to register for current or future semesters. Students with accounts owing greater than \$.01 will not be permitted to receive official university documents such as transcripts or diplomas.

Graduate Fees. Fees for in-state and out-of-state residents are different and are not covered by tuition waivers. A listing of all graduate fees is available at <http://studentbusiness.fsu.edu>.

Tuition Payments and Arrangements. The student's user name and password are required to access the Online Account Statement at <http://my.fsu.edu> (from **myFSU Portal**, click Student Central, My Bill, **\$ Make a Payment**). Tuition and fees are due according to the established deadline at <http://studentbusiness.fsu.edu>. Financial aid is disbursed up to ten days prior to the start of classes and as received by the University any time thereafter. We encourage students to submit their third-party agency billings as soon as they have registered for classes. All third-party agency billings, departmental billings, FSU employee scholarships, state employee waivers, and Veteran's deferments are due by the third day of classes each semester.

Assessment of Fees. Fees are established by the Florida State University Board of Trustees and the Florida State Legislature and are subject to change. The University will calculate and assess the charges to be settled for fees due based on the fee rates authorized by the Florida State University Board of Trustees and the student's schedule. Students should review their **Account Summary** at <http://my.fsu.edu> (from **myFSU Portal**) to verify the accuracy of the charges. At the time of payment, students should also review their payment receipt to verify the payment made, any outstanding charges owed, or any outstanding arrangements. Credit and debit card payments can be made at <http://www.fees.fsu.edu>. **Students who do not pay tuition and fees or make payment arrangements by the established deadline for each term will be assessed a \$100.00 late payment fee and may have their course schedule cancelled.**

Panama City Campus. Students who intend to enroll at the Panama City campus of Florida State University may pay their fees at: *Cashier's Office, 4750 Collegiate Drive (Barron Building, 1st Floor), Panama City, FL 32405*. Students may pay by check, cash, money order, or cashier's check when paying in person. Credit card payments can ONLY be made at <http://www.fees.fsu.edu>. There is a non-refundable scaling fee of 2.3% for each transaction. Accepted forms of online payment include: American Express, Discover, MasterCard, and Visa. Electronic check payments are free of charge. For further information, please call (850) 770-2119 or e-mail cashier@pc.fsu.edu.

Florida Residency Requirements for Tuition Purposes

The Florida Residency for Tuition Purposes Policy is based upon state statute, rules of the two higher education governing boards in Florida, and statewide guidelines developed by college and university administrators in conjunction with the Statewide Residency Committee and the Florida Department of Education. Section 1009.21, Florida Statutes, outlines the broad legal parameters for establishing residency for tuition purposes in Florida public higher education institutions. It is the highest level of authority regarding residency as established by the Florida Legislature. This statute also provides authority for the Department of Education to establish rules related to residency for tuition purposes.

Please note: Under Florida law it is possible for U.S. citizens with undocumented parents/guardians, lawful permanent residents, and certain non-U.S. citizens to be classified as Florida residents for tuition paying purposes. In addition, undocumented and Deferred Action for Childhood Arrivals (DACA) students who have attended a Florida secondary school for three consecutive years immediately preceding high school graduation, and apply for enrollment to a Florida public post-secondary institution within 24 months of high school graduation, may qualify for a waiver of out-of-state tuition fees.

At Florida State University there are three offices responsible for the review of residency for tuition purposes: the Office of Admissions, the College

of Law, and the College of Medicine. The Office of Admissions determines residency for first-time-on-campus students except for the applicants to the College of Law or College of Medicine which are handled by their respective admissions staff. Reclassification determinations for students who enroll as out-of-state students for tuition purposes and wish to change to in-state students for tuition purposes are handled by the Office of Admissions. Each residency decision will be determined based upon all available information from the application for admission and the "Florida Residency Declaration for Tuition Purposes" form. The University reserves the right to request additional information if warranted.

For the full text of Florida Statute, Section 1009.21: <https://www.flsenate.gov/Laws/Statutes/2014/1009.21>

For the full text of State Board of Education Rule 6A-10.044: <https://www.ftrules.org/gateway/RuleNo.asp?ID=6A-10.044>

For the full text of State Board of Education Rule 6A-20.003: <https://www.ftrules.org/gateway/RuleNo.asp?ID=6A-20.003>

For the full text of Board of Governors Residency Regulation 7.005: <http://www.flbog.edu/board/regulations/regulations.php>

Residency Appeal Committee

Students who are denied the classification of Florida resident for tuition purposes have the right of appeal. The appeal must be based upon new information that was not made available during the initial review. All appeals must be in writing to the Residency Appeal Committee, care of the Office of Admissions. Appeals should be submitted as soon as possible after receipt of the initial decision and no later than the end of the term for which Florida residency for tuition purposes is desired. All appeals will be reviewed by the Residency Appeal Committee and Committee decisions are final.

Residency Guidelines

A Residency Guidelines document was adopted by the Articulation Coordinating Committee to assist college and university administrators in implementing Florida Residency for Tuition Purposes Policy. The Guidelines are maintained by the Statewide Residency Committee which is comprised of residency experts from the state's public colleges and universities.

For the full text of the Guidelines on Florida Residency for Tuition Purposes, visit https://www.floridacollegesystem.com/sites/www/Uploads/files/Students_pages/ACCResidencyGuidelines.pdf.

Basic Definition of Residency for Tuition Purposes

A Florida resident is a student who has, or a dependent person whose parent or legal guardian has, established and maintained legal residency in Florida for at least twelve months preceding the first day of classes of the term for which residency is sought. **Residence in Florida must be as a bona fide domicile rather than for the purpose of maintaining a residence incident to enrollment at an institution of higher education.** To qualify as a Florida resident for tuition purposes, the student must be a U.S. citizen, permanent resident alien, or in legal status as determined by U.S. Citizenship and Immigration Services (USCIS).

Please note: See above for information about individuals who are U.S. citizens with undocumented parents/guardians, lawful permanent residents, Deferred Action for Childhood Arrivals (DACA), and certain non-U.S. citizens who may be classified as Florida residents for tuition paying purposes.

Other persons not meeting the twelve-month legal residency requirement may be considered as Florida residents for tuition purposes only if they fall within one of the exception categories authorized by the Florida Legislature and State Board of Education. All other persons are ineligible for classification as a Florida resident for tuition purposes.

Living in or attending school in Florida will not, in itself, establish legal residence for tuition purposes. Each student shall submit a Florida Residency Declaration for Tuition Purposes form, electronically or in another format, and the documentation required to establish Florida residency for tuition purposes. The burden of providing clear and convincing documentation that justifies the University's classification of a student as a resident for tuition purposes rests with the student. For documentation to be "clear and convincing," it must be credible, trustworthy, and sufficient to persuade the University that the applicant has established legal residence in Florida. Students who depend on out-of-state parents for support are presumed to be legal residents of the same state as their parents.

Tuition and Instructional Fees

The "Academic Calendar" appearing in the *Registration Guide* each term sets forth the beginning and ending dates of each term and all deadlines.

Assessment of Fees

The following fees and charges are based on current rates; however, since the *General Bulletin* must be published in advance of its effective date, it is not always possible to anticipate changes, and the fee schedule may be revised. Every effort will be made to publicize changes for any semester in advance of the registration date for that semester. Current information is available at <http://studentbusiness.fsu.edu/>.

Students are assessed fees based on the level of the course as established by the State Board of Education and the Florida State Legislature.

Actual Course Fee Charge per Credit Hour 2019–2020 at the FSU Main Campus

Course Level	In-State & Enrolled in a Florida Prepaid Account Before 7/1/07	In-State */**	Out-of-State */**
0001–4999	\$165.96	\$215.55	\$721.10
Repeat Course Fee per credit hour (undergraduate only)		\$192.85	\$192.85

*Includes Tuition Differential Fee

Course Level	In State**	Out-of-State**
5000 and above	\$479.32	\$1,110.72
Law \$688.11		\$1,355.18
Medical per year	see http://med.fsu.edu	

**Per credit hour does not include the Student Facilities Use Fee assessed to Main Campus Students at the rate of \$20 per semester.

Actual Course Fee Charge per Credit Hour 2019–2020 at the FSU Panama City Campus

Course Level	In-State	Alabama/Georgia Special Rate*	Out-of-State
0001–4999	\$180.49	\$200.49	\$686.04

*Visit <http://www.pc.fsu.edu/>

Course Level	In State	Alabama/Georgia Special Rate*	Out-of-State
5000 and above	\$444.26	\$464.26	\$1,075.66

*Visit <http://www.pc.fsu.edu/>

Zero Credit-Hour Course Fees

Registration for zero credit-hour provides for examinations, graduations, use of facilities, etc., when deemed appropriate by the institution. The student is assessed Resident tuition and fees for one credit hour. If the student is simultaneously registered for other credit courses, the charge for the zero-hour registration will not be assessed.

Students enrolled in cooperative education courses with zero semester hours will be charged for one semester hour of Florida resident undergraduate work, unless also enrolled in other credit courses at Florida State University during the same academic term.

Students registered in courses for zero semester hours (master's comprehensive examination, master's thesis defense, dissertation defense, or other graduate-level zero semester hour courses) will be charged for one Florida resident graduate semester hour, unless also enrolled in other credit courses at Florida State University during the same academic term.

Special Fees, Fines, and Penalties

Note: All fees subject to change.

Application Fee: \$30.00. Applicants for admission as degree-seeking or non-degree-seeking are assessed a non-refundable application fee.

Admission Deposit: \$200.00. Admitted freshman and law school students who plan to attend Florida State University must pay a **non-refundable fee** that will be applied to their tuition.

Late Registration Fee: \$100.00. A late registration fee is assessed when a student does not begin registration during the time provided under the academic calendar.

Late Payment Fee: \$100.00. A late payment fee is assessed against students who do not pay their tuition in full by the required due dates (see the "Academic Calendar" in this *General Bulletin*).

FSUCard Term Fee: An FSUCard semi-annual fee of \$5.00 is assessed to students each Fall and Spring semester based on campus and location.

Replacement FSUCards: \$15.00. A fee for the preparation of a new card is assessed against those students, including high school students, who lose their FSUCards.

Duplication/Photocopying Fee: At cost. A fee is assessed for duplicating or photocopying documents.

Standard Tests Fee: At cost. A fee is assessed for test materials and related factoring or grading charges levied by an external agency used in standardized tests, such as the Graduate Record Examinations.

Transcript Fee: \$10.00. This fee is assessed for each official transcript issued.

Installment Contract Fee: \$10.00 per contract. This fee is assessed for executing an installment contract for tuition payment available during Fall and Spring semesters only.

Transportation Access Fee: \$8.90 per credit hour. **Rate subject to change.** This fee is assessed per credit hour to all main campus students. It covers all modes of transportation on campus such as sidewalks, bikes, mass transit (on- and off-campus buses), and vehicles. Revenue generated by this fee is used to improve the overall infrastructure of campus for all students. For additional information about parking locations, rules, regulations, and rates, go to <http://transportation.fsu.edu>.

Returned Check Charge/Stop Payment Charge: \$25.00 or five percent (5%) of the amount of the check, whichever is greater (rate subject to change). A returned check/stop payment charge is assessed against the account of a student who has a check or electronic authorization for payment returned by the bank to Florida State University. Florida State University automatically submits all personal checks twice for payment if the check was returned once for insufficient or uncollected funds. This is an automated process, and the second submission cannot be stopped; however, there is no charge assessed by Florida State University for this second submission.

Returned check charges are assessed for all personal checks written and electronic payments authorized for tuition, fees, or any services provided by the University that are returned to Florida State University for insufficient funds, uncollected funds, wrong account numbers, closed accounts, and stop payments placed on checks. In addition to the returned check charge, if the initial payment is for tuition and redemption of the returned item is not made prior to the tuition payment deadline, a late payment fee is assessed to tuition and student may be subject to tuition cancellation. Florida State University places a hold on accepting any personal checks or electronic payment authorizations from anyone on the student's account for ninety days after redemption for any services, tuition, or fees that are owed to the University if a personal check or electronic payment is returned. Redemption must be paid with cash, money order, or cashier's check. If a second check is returned or a stop payment is placed on it, the student will be permanently listed on all departments' ACCEPT CASH ONLY list, and **no personal checks will be accepted from anyone on the student's account from that day forward.**

Notification will be sent to the student via mail to the address on the check or to the last maintained address in Florida State University's records. A copy of the notification letter will be sent to the maker of the check at the address on the check, if the student is not the person on whose account the funds are drawn. After notification that a check has been returned, redemption including the service charge must be made by seven working days with cash, money order, or cashier's check. Florida State University forwards all returned checks to the State Attorney's office for redemption and prosecution after collection efforts are exhausted. After a returned check is forwarded to the State Attorney's office, redemption of the check will not prevent prosecution.

Thesis, Treatise, and Dissertation Fees: All Thesis, Treatise, and Dissertation students are required to submit their manuscripts to ProQuest directly. There is no fee associated with traditional publishing. Students may choose to pay a copyright fee, an open access fee, or may order bound copies, if desired.

- **Copyright Fee:** Optional through UMI/ETD, at cost.

- **Open Access Fee:** Optional through UMI/ETD, at cost

Loss and Damage Fees: At cost. Students who lose or damage equipment may be assessed a breakage or loss fee to pay for breakage or loss of equip-

ment. Upon completion of the course, the instructor will prepare a listing of the cost of all such lost and damaged equipment and assess the student a loss or damage fee. The charge varies, based on the cost of the item, and generally applies to students taking laboratory courses.

Scientific Laboratory Fees: Varies. Students enrolled in certain laboratory courses are assessed a fee that is used to offset the cost of scientific materials or items consumed in the course of the students' laboratory activities. These fees are assessed based on the course.

Library Fees

Note: All fees subject to change.

	Overdue Fees	Replacement Fees
Books		Billed for replacement cost at 30 days overdue, or damaged
Failure to Return Recalled Items	\$0.25 per day	Billed for replacement cost at 30 days overdue, or damaged
Interlibrary Loan	Cost determined by the loaning library	Cost determined by the loaning library
Reserves	\$3.00 per hour	Billed for replacement cost if lost or damaged
Videos	\$0.25 per day	Billed for replacement cost at 7 days overdue, or damaged
Laptops	\$10.00 per hour	\$1,800 replacement cost if lost or damaged
Laptop Power Cords	\$5.00 per hour	Billed for replacement cost if lost or damaged
Headphones	\$0.25 per hour	Billed for replacement cost if lost or damaged
Study Rooms	\$10.00 per hour	
Study Room Supplies	\$0.25 per hour	SMART board pens: up to \$50.00 VGA/USB cables: up to \$50.00 Speakers: up to \$400.00 SystemOn Module: \$150.00

Housing Costs

For complete descriptions of housing facilities, services, costs, and how to contract for University Housing, refer to the "Housing" chapter of this *General Bulletin*.

Annual Estimate of Cost

The annual estimated costs listed below are for the 2019–2020 academic year and do not include Summer tuition. They do not apply to law or medical students. The estimate is taken from the Office of Financial Aid Web site at <http://financialaid.fsu.edu>.

Note: International students should refer to <https://cge.fsu.edu/international-students/new-students> for an estimated cost of attendance.

Graduate	Florida Residents	Non-Florida Residents
Tuition/Fees¹	\$9,630	\$22,270
Housing	\$8,218	\$8,218
Food	\$4,240	\$4,240
Books/Supplies	\$1,000	\$1,000
Personal/Health Insurance²	\$5,038	\$5,038
Transportation	\$1,180	\$2,398
TOTAL	\$29,306	\$43,146

¹The tuition and fee estimate is based on ten semester hours for graduate students attending two terms (Fall and Spring) per year at the Tallahassee campus. Refer to the Student Business Services Web site at <http://studentbusiness.fsu.edu> for tuition rates for all campuses or specific programs.

²Cost of meeting this requirement is included in financial aid considerations. Students who currently have health insurance may show proof of comparable coverage and may not be required to purchase the University policy. Refer to <http://www.uhs.fsu.edu> for additional information.

Payment of Fees

Payment of registration fees and tuition detailed below is an integral part of the registration process. Registration (including payment of fees) must be completed on or before the proper due date. The appropriate University office

must be provided a properly executed authorization to defer fees prior to the deadline published in the academic calendar in those cases where fees are to be paid by a previously approved loan, scholarship, or other third-party arrangement. Florida Prepaid College Program without local fees does not pay the full amount due, nor do Intern Participation Certificates. Students must pay the remaining balance due by the published deadline.

Method of Payment

Students who enroll must pay fees and tuition in full or initiate an installment contract by the tuition payment deadline. We encourage students to submit their third-party agency billings as soon as they have registered for classes. All waivers, agency billings, and department billings for all students must be submitted by the third day of the term. Financial aid deferments will be entered by the Office of Financial Aid for eligible student accounts. If tuition is not paid or arrangements have not been made by the posted deadlines, a late payment fee will be assessed. Any course added after the tuition payment deadline must be paid in full within five days or a \$100.00 late payment fee will be assessed. The University does not send out a paper bill because students may change their course schedule and therefore the amount owed through the fourth day of the semester will be inaccurate. Tuition and fees should be paid by the fee payment deadline as posted at <http://studentbusiness.fsu.edu>. Note that other University related fees have separate and earlier deadlines. Students can, however, get the amount of their tuition and fees due on the Internet at <http://my.fsu.edu> (from **myFSU Student Portal**, click **\$ Make a Payment**) or when they register for classes through the Web. Other options include accessing the kiosks located on the first floor of *University Center A Building*, calling the Office of Student Business Services at (850) 644-9452, or going to *A1500 University Center*, 8:30 a.m.–4:30 p.m. Monday–Friday.

Students may pay by check, cash, money order, cashier's check, or FSUCard when paying in person. Florida State University does not accept two-party checks or foreign checks for payment. Make checks payable to Florida State University and include **one** of the following on your check: your EMPLID, the last four digits of your social security number, or your FSU e-mail address, your driver's license number, as well as your local phone and address. We accept FSUCards, American Express, Discover, MasterCard, Visa, and electronic checks via Internet only. Payment methods are described below. Credit card payments can only be made through the Internet at <http://www.fees.fsu.edu>, Student Central at <http://www.my.fsu.edu>, or at kiosks located around campus. There is a 2.3% scaling nonrefundable fee for each transaction.

Installment Contracts. The Student Business Services Tuition Installment Contract is the only form of tuition payment plan that the University offers. This plan is only available in the Fall and Spring terms. Through this plan, students must pay half (tuition and fees greater than \$150.00) of their currently owed tuition, plus a \$10.00 Installment Contract Fee, by noon on the main campus tuition payment deadline. The second half of the installment payment is due by the sixth week of class. The installment contract agreement may be executed in person or by calling Student Business Services. Failure to pay the balance of tuition by the due date will result in a late payment fee and a financial hold on your account and may result in the cancellation of your course schedule. Once an installment contract is executed, any course added at a later date must be paid in full within five days. It will not be covered under the previously executed contract. Failure to pay tuition in full for such a course will result in the assessment of a late payment fee.

Convenient Drop Box for Payments. The Office of Student Business Services has kiosks for student use at the first floor of the *University Center Building A*, near our office at *A1500*. Students may verify the amount due for tuition and fees (at the kiosks or through the Internet at <http://www.fees.fsu.edu>), insert a check, money order or cashier's check in the provided envelope, and put the envelope in the drop box. Payments are processed the next business day. Payments received in the drop box by 4:30 p.m. on the tuition payment deadline will be considered on time. Payments inserted after 4:30 p.m. will be considered late and assessed a \$100.00 late payment fee. Please do not deposit cash. We will not process foreign checks or two-party checks. Make checks payable to Florida State University and include **one** of the following on your check: your EMPLID, the last four digits of your social security number, or your FSU e-mail address, driver's license number, as well as your local phone and address. Checks not completed properly will be considered late.

Mail-In Tuition and Fee Payments Must Be Received by the Deadline. When paying fees by mail, send a personal check, money order, or cashier's check for the full amount of fees due. Please do not send cash. Checks not received by the tuition payment deadline will be considered late and will be assessed a \$100.00 late payment fee. We will not process foreign checks, checks not completed properly, or two-party checks. Make checks payable to Florida State University and include **one** of the following on your check: your EMPLID, the last four digits of your social security number, or your FSU e-mail address, your driver's license number, as well as your local phone and address.

Checks not properly completed will be considered late. Payments should be mailed to *Florida State University, Office of Student Business Services, A1500 University Center, Tallahassee, FL 32306-2394*.

Agency Billing. Students are responsible for all tuition and fees upon registration. Forms are available at <http://studentbusiness.fsu.edu>. Students who are requesting their tuition be paid by an agency must submit the required documents as soon as possible, but no later than the third day of the semester, and preferably thirty days in advance. Those students receiving financial aid should submit the documents by the third day of the semester; otherwise, tuition will be deducted from the student's financial aid and refunds will not be made to the student until the agency or department makes their payment to the Office of Student Business Services. Financial aid students must report this payment as an income source on their application, or upon further evaluation by the Office of Student Financial Aid, the student may be "over-awarded" and may be required to repay financial aid to the University. If the agency or department has not paid the tuition by the end of the current semester, a late payment fee of \$100.00 will be assessed to the student's account and the student is required to pay it before being granted other University services. Accounts left unpaid at the end of the semester will be put in a delinquent status and the student will not be able to receive University services (registration, transcripts, diplomas, etc.) Agencies that do not pay in a timely manner may cause the Office of Student Business Services to put the student's account in a non-billing status for subsequent semesters; consequently, the student will be required to pay tuition by the regularly scheduled deadline, and the University will refund to the student the amount that the agency pays (less University charges) after they have paid it. Students with agency payments that are contingent upon grade(s) received are not eligible for agency billing, and tuition must be paid by the regularly scheduled deadline. The Office of Student Business Services does not bill agencies for housing, books, meals, etc.

Departmental Billing. Departmental billings must be submitted to the Office of Student Business Services by the appropriate college or school by the third day of each semester. Financial aid students must report this payment as an income source on their application, or, upon further evaluation by the Office of Student Financial Aid, the student may be "over-awarded" and may be required to repay financial aid to the University. For information regarding departmental billings, undergraduate students should contact the Office of Faculty Development and Advancement at (850) 644-6876; graduate students should contact the Dean of the Graduate School at (850) 644-3501.

State Employee Tuition Waiver

Full-time state employees may be eligible for the state employee tuition waiver. Registration in classes is limited to a space-available basis. Individuals using the state tuition waiver must be fully admitted degree-seeking or non-degree-seeking students. Florida State University does not consider the following to be space-available courses: remedial courses; dissertation, thesis, and directed individual study (DIS) courses; internship courses; Center for Academic and Professional Development (CAPD) courses; College of Medicine courses; College of Law courses; other one-to-one instruction courses; and all non-state funded courses (including some distance learning courses that are funded solely by student tuition and fees). Please contact the academic department to inquire about course funding. Accordingly, state employee tuition waivers may not be used for these courses.

Florida State University accepts only the official FSU State Employee Tuition Waiver form. Agencies may require additional paperwork or forms that will not be accepted at Florida State University unless accompanied by the FSU State Employee Tuition Waiver form.

State employees using a tuition waiver must complete the registration process and submit the tuition waiver to the Office of Student Business Services.

Panama City Campus

Students who intend to enroll at the Panama City campus of Florida State University may pay their fees at: *Cashier's Office, 4750 Collegiate Drive, Panama City, FL 32405*. Students may pay by check, cash, money order, or cashier's check when paying in person. Credit card payments can ONLY be made via the Internet at <http://www.fees.fsu.edu> or by logging into <http://www.my.fsu.edu> and visiting Student Central. There is a non-refundable scaling fee of 2.3% for each transaction. Accepted forms of online payment include: American Express, Discover, MasterCard, and Visa. Electronic check payments are free of charge. For further information, please call (850) 770-2119 or e-mail cashier@pc.fsu.edu.

Florida Prepaid College Program

This program was created by the State of Florida to guarantee payment of tuition and may include optional dormitory contract guarantees and an optional local fee plan, and differential fee plan (note: the differential fee is waived for semesters during which plans contracted in summer of 2007 or earlier are

billed). **The primary plan pays the rate the University assesses for tuition (i.e. the matriculation fee), plus student financial aid and capital improvement fees, but excludes local fees (i.e. athletics, activities and services, student health) unless the local fees plan was purchased.** Additionally, there are fees that no Florida Prepaid plan covers, including laboratory and equipment fees, transportation access, technology, student facilities use fee, online class fees, and books. Fees not covered by Florida Prepaid must be paid by the student using one of the options described above and by the deadlines stated above. The student is to verify that the billing is being processed by reviewing the FSU bill available at <http://my.fsu.edu>. **Students using the Florida Prepaid College Program are responsible for paying any fees not covered by Florida Prepaid by the tuition payment deadline or they will be assessed a \$100.00 late payment fee. (Rate subject to change).** Additional information may be obtained by writing: *Florida Prepaid College Program, P.O. Box 6448, Tallahassee, FL 32314-6448*; by calling 1 (800) 552-4723, or by visiting <http://www.myfloridaprepaid.com/>.

Fee Liability

Liability is incurred for all credit hours at the time of registration for classes. The student is responsible for dropping classes or withdrawing from school. For more information on policies regarding attendance and schedule cancellation, please refer to the section on 'Cancellation of Student Schedules for Non-Payment of Tuition and Fees'. Out-of-state tuition and matriculation fee waivers will not cover dropped or withdrawn classes.

Repeat Course Surcharge

Section 1009.29, Florida Statutes, mandates that each student attempting the same non-repeatable undergraduate course more than twice beginning with the Fall Semester 1997 shall be assessed an additional per credit hour surcharge beginning with the third attempt. Attempted hours include those hours dropped, withdrawn, and repeated that are fee liable. Undergraduate level courses are numbered 1000 to 4999.

The repeat course surcharge is subject to change annually based upon calculations by the Florida Board of Governors.

The only exceptions:

- Any course taken prior to Fall 1997;
- Attempts taken at an institution other than FSU;
- Graduate level courses (courses numbered 5000 and above);
- Any non-fee-liable course dropped or withdrawn;
- Courses taken through cooperative education, military, waivers, and audits; and,
- Individualized study, courses that are repeated as a requirement of a major, and courses that are intended as continuing over multiple semesters. However, courses repeated more than two times to increase GPA or meet minimum course grade requirements are eligible for the surcharge.

Repeat Course Surcharge Appeal

Section 1009.285, Florida Statutes, provides authority to universities to consider appeal of the repeat course surcharge based on documented evidence of financial hardship. Appeal forms are available in the Office of the University Registrar, *A3900 University Center, Tallahassee, FL 32306-2480*, (850) 644-3403. Appeals must be submitted to the Office of the University Registrar no later than the last day of classes for the term in which the surcharge is assessed.

Delinquent Fees

Students who have amounts owed to the University may not complete their registration, receive a diploma, receive an Associate of Arts degree, or receive a transcript until all amounts owed to the University have been satisfactorily settled. This includes, but is not limited to, library charges, health center charges, parking fines, and University debt. All payments will be applied to the current tuition first and then to the oldest outstanding debt. Nonrefundable collection fees, as well as legal fees and interest assessment through court judgments, are added to a student's account if the student has had an outstanding debt for 120 days or longer. When an account is sent to a collection agency, the customer must make payment arrangements directly with the agency. Payment arrangements do not permit student privileges such as registration, official transcripts, etc. Accounts must be paid in full to obtain further privileges.

Registration Stop for Outstanding Charges

A "stop" is placed on all academic progress for those students who have outstanding charges due to the University. Students owing an amount equal to or greater than \$500.00, including current semester tuition, are not permitted to register for classes. The "stop" will not be removed, and such students will

not be permitted to register or receive other University services, until the debt is cleared. A hold on transcripts and diplomas will be placed on students for outstanding charges of any amount.

Cancellation of Student Schedules for Non-Payment of Tuition and Fees

In accordance with Florida State University Regulation 5.081 *Tuition, Fees, Payment*, students who do not pay tuition and fees or make arrangements to pay tuition and fees by the end of the established fee payment deadline may have their schedules cancelled and academic progress discontinued for the semester. Students will be notified using their FSU e-mail account concerning outstanding tuition delinquencies and given an opportunity to pay tuition and fees or make arrangements for tuition and fee payment with the Office of Student Business Services prior to cancellation. Students whose schedules are canceled for non-payment of tuition and fees will have their academic progress discontinued for the term in question and will not be able to attend class or receive grades. For more information, please reference FSU Adopted Regulations, Chapter 5 - Academic Matters available at <http://regulations.fsu.edu/regulations/adopted-regulations>.

Reinstatement of Student Schedules Cancelled for Non-Payment of Tuition and Fees

Students whose schedules are cancelled for non-payment of tuition and fees may appeal to the University Registrar for reinstatement and continuation of academic progress for the term. A written appeal must be submitted to the University Registrar by the end of the seventh week of classes as identified in the University Academic Calendar (consult the *Registration Guide* for deadline dates). Prior to a student's appeal being approved, the Office of Student Business Services must verify that payment for the current term has been received or that appropriate arrangements have been made for tuition and fee payment. Students whose schedules are reinstated are subject to a \$100.00 late registration fee and a \$100.00 late payment fee. Check or credit card payments that are returned or refused will negate any tuition payment agreement for the reinstatement of a student's schedule. The University reserves the right to deny reinstatement when a demonstrated pattern of tuition delinquencies over two or more semesters has occurred.

Note: The appeal must be submitted by the seventh week deadline for the term that was cancelled. Appeals received during the next term, for a prior term's cancellation, will be deemed to have missed the deadline and may not be considered.

Tuition Waivers, Deferments, and Financial Arrangements

Out-of-State Tuition and Out-of-State Fee Waivers

Florida State University is a comprehensive university that assists students in their degree completion, research, and instructional activities. Under the terms of Florida statute (1009.26(9)), the State University System Board of Governors authorizes Florida State University's Board of Trustees to waive tuition and out of state fees, "for purposes that support and enhance the mission of the University." To fulfill the University's goals and obligations, the University provides tuition waivers for qualifying graduate assistants and out-of-state tuition waivers when funding allows. To be eligible for tuition and out-of-state fee waivers, a graduate assistant must be appointed on one of the following codes: M9182, M9184, N9185, W9185, Z9185; have at least a full-time equivalent of one-quarter time; and the assistantship must be at least begin the first day of each academic term and last through the last day of finals. Additionally, the graduate assistant should have an approved full-time load.

The established priorities for the use of waiver funds are as follows:

- Teaching assistants
- Research assistants on contracts and grants
- Assistants not appointed as teaching assistants or on contracts or grants

Only students with regular graduate student status are eligible for graduate assistantships. Special, provisional, and part-time students do not qualify for graduate assistantships.

Waivers are also provided as part of some fellowship packages offered by the University.

Waivers are cancelled if the student withdraws from the University, drops below the required academic load, or terminates the assistantship or fellowship. **Waivers will be revoked if any University authority terminates the assistantship upon which the waiver is based or cancels the student's en-**

rollment. Waivers will not cover any dropped classes. The student will be responsible for the corresponding tuition should a waiver be cancelled or revoked. The student will be responsible for any fees assessed.

Military Veterans, Service Members, and Their Dependents

For information regarding out-of-state tuition waivers for military veterans, service members, and their dependents, please refer to the "Student Veteran Information" chapter herein.

Florida Residents Over 60 Years of Age

When registering to audit courses not for credit, all fees are waived for citizens sixty years of age and older who are Florida residents. All requirements pertaining to auditing courses must be met, and, in addition, proof of age and residency must be presented. For further information, refer to the "Academic Regulations and Procedures" chapter of this *General Bulletin*.

Note: Audited courses do not earn credit hours or appear on a student's permanent record.

Waiver of Late Fees

A student may request a waiver of the late registration fee at the Office of Student Business Services. Documentation supporting University error or extraordinary circumstances will be required.

A student may request a waiver of the late payment fee at the Office of Student Business Services if payment was not made by the established deadline because of a University error, administrative error, or extraordinary circumstances beyond the control of the student. Supporting documentation is required.

Note: Lack of funds, not applying for financial aid on time, or not being aware of the payment deadline are not valid reasons for waiving the late fee. Request to waive late payment fees must be made by completing a waiver request form available online at <http://studentbusiness.fsu.edu/>. If the request is denied, the student may appeal to the Late Payment Fee Appeals Committee by contacting the Office of Student Business Services at (850) 644-9452. The committee meets once a month or as needed.

The **Late Payment Fee Appeals Committee**, which consists of representatives from the Office of the University Registrar, Office of Financial Aid, and the Office of Student Business Services, provides an opportunity for students to appeal a denial of their request for a late payment waiver. The appeals committee's decision is the final step in the University's late payment appeal process. Forms are available at <http://studentbusiness.fsu.edu/>.

Deferments and Financial Arrangements

Financial aid is disbursed early in the semester. Students must pay or make arrangements to pay all fees due by the tuition payment deadline.

Financial aid deferments are authorized by the Office of Financial Aid. Departmental billings are authorized by the school or college issuing the billing. Agency billings are authorized by the approved agency to pay fees on behalf of the student. The third party billings are to be completed by the student at *A1500 University Center* no later than the third day of the term. Outstanding tuition from a previous semester will be deducted from financial aid received during a current semester. A refund will not be processed until payment is made by the agency or department. Agency billing forms are available at <http://studentbusiness.fsu.edu/>.

Veterans Deferments. For information regarding veteran's deferments, please refer to the "Student Veteran Information" chapter herein.

Application Fee

Individuals who make application to Florida State University shall pay a nonrefundable application fee of \$30.00. This fee may be waived for graduate applicants in designated sponsored programs.

Refund of Fees

Regulations Concerning Refund of Fees Paid

Students incur a liability for all credit hours that remain on their schedule of courses as of the end of the official drop/add period. The amount of this liability is identified on the Student Assessment Payment Schedule. Any amount paid in excess of the amount owed (assessed fee and outstanding University charges) during the term will be carried forward and will be applied against subsequent University charges incurred or may be refunded by request.

Full refunds of tuition fees may be granted in instances of withdrawal from the University under the following conditions:

1. Involuntary call to active military duty
2. Death of the student or death in the immediate family (parent, spouse, child, sibling)
3. Illness of the student of such duration or severity, as confirmed in writing by a physician, that completion of the term is precluded
4. Cancellation of the course by the University
5. Exceptional circumstances that could not have been foreseen and were beyond the control of the student, as approved by the University refund committee.

Students who drop a course without fee liability after their tuition and fees are paid may be eligible for a tuition refund. Any amount paid in excess of the amount owed to the University during the semester/term will be carried forward and may be applied against subsequent University charges incurred or will be refunded upon request; however, **any outstanding charges owed to the University will be deducted and the balance will be issued as a refund.** The refund will be processed as a credit to the student's direct deposit bank account or by check when required. Payments made by credit card will be refunded to the payment card. Refunds requested during the fiscal year close-out, during the last two weeks of June, will not be processed until the first week of July.

Students who withdraw after the fourth day of the semester/term but prior to the end of the fourth week of the semester (or for Summer sessions by the first twenty-five percent of the term) are eligible for a twenty-five percent refund of tuition and fees. After this period, students who withdraw are held fully liable for fees. Students who withdraw and have received federal financial aid (Title IV programs), state or university aid may be required to repay to the aid source the amount of unearned financial aid funds disbursed to them as of their withdrawal date as described in the section on 'Withdrawals and Return of Financial Aid.'

Note: In the case where a withdrawal petition is approved, a refund can only be provided **if the refund withdrawal request is submitted and completed within six months after the end of the semester/term in which the withdrawal occurred.** If financial aid is received by the student during the term in which the refund is granted, state and federal regulations may require that the refund be returned to the aid source.

An application for a request for refund of fees should be submitted as follows:

- **Food Plan.** *Director of Food Services, 144 Oglesby Union*
- **Housing Fees.** *Assistant Director of Housing for Contracts and Assignments, 109 Student Life Building*
- **Parking Decals.** *Director of Transportation & Parking Services, 104 North Woodward Avenue*
- **Textbooks.** *Manager of Florida State University Bookstore, Parking Garage, Main Level*

Withdrawal and Return of Financial Aid

Per federal regulation (34 CFR 668.22), students who withdraw and have received financial aid will be required to repay to the program sources the amount of unearned financial aid funds disbursed to them as of their withdrawal date. The unearned amount of program funds is calculated based on the last date of academic activity, which indicates the percentage of the semester completed.

Both the University and students receiving financial aid are required to return unearned financial aid to the aid source. Title IV aid programs are repaid in the following order: Unsubsidized Stafford/Direct loans, Subsidized Federal Stafford/Direct loans, Federal Perkins Loans, Federal PLUS/Direct PLUS loans, Federal Pell Grants, Federal Supplemental Education Opportunity Grant (FSEOG) Program, and Teach Education Assistance for College and Higher Education (Teach) Grants.

The University is required to return the unearned portion of the financial aid funds it received from withdrawing students that was used to pay institutional charges such as tuition, fees, housing, and other education-related expenses assessed by the institution. The funds returned to the aid source by the University will be credited against the students' total liability of unearned funds. **Students will owe the University the amount returned to the aid source for institutional charges.** In addition, any student who receives Title IV funds who stops attending classes during the semester and does not officially withdraw from the University is considered an unofficial withdrawal according to Title IV federal regulations. The University is required to return unearned financial aid to the federal government for all unofficial withdrawals in the same manner as students who withdraw officially.

Students who owe grant overpayments remain eligible for Title IV program funds for forty-five days if, during those forty-five days, the student: 1) repays the overpayment in full to the University; 2) enters into a repayment agreement with the University; or 3) enters into a repayment agreement with the Department of Education. Entering into a repayment agreement does not mean the student is eligible to register for additional classes, receive a transcript, diploma, etc. Students can lose financial aid eligibility if they do not comply with the options above and should consider their repayment responsibilities for these programs as part of any withdrawal decision.

Bright Future Repayment Requirement

Florida Statute also requires that students who drop or withdraw from any course(s) must repay any Florida Bright Futures Scholarship disbursed for the course(s). However, a student who receives an award under this program and subsequently drops one or more courses or withdraws from all courses after the end of the drop and add period due to a verifiable illness or other documented emergency may be granted an exception pursuant to s. 1009.40(1)(b)4., **unless the institution's policy is to refund the cost of the courses.**

Financial Aid

Director of Financial Aid: Somnath Chatterjee

General Information

Florida State University recognizes the high cost of education today and makes every effort to offer financial assistance through a variety of programs to qualified students. In addition to providing funds on the basis of demonstrated financial need in the form of grants, work-study offers, and loans, the University offers scholarships to recognize and reward talent, academic achievement, and meritorious performance.

The Office of Financial Aid is committed to serving and guiding students through the process of applying for financial aid. Help in completing the Free Application for Federal Student Aid (FAFSA) is available from professional financial aid counselors located in the *University Center Building A, Room 4400*.

After a student completes the FAFSA and is admitted, the financial aid status should be monitored by visiting <http://www.my.fsu.edu/>. This site also provides information on any outstanding documents required to complete the financial aid file. Upon admission and completion of the financial aid file a student's financial aid offer may also be found on this site.

The hours of operation for the Office of Financial Aid are 8:00 a.m. to 5:00 p.m., Monday through Friday. Counseling is available by phone at (850) 644-0539 or at the information center *A4400 University Center*, Monday through Friday, 8:00 a.m. to 5:00 p.m.

Panama City Campus

Students who intend to enroll at the Panama City campus and are in need of financial support should contact: *Coordinator for Financial Aid/Veteran Affairs, Office of Student Affairs, 4750 Collegiate Drive, Panama City, FL 32405*, or by phone at (850) 872-4750.

Graduate Students

Graduate students may apply for federal loans and federal work-study by completing the Free Application for Federal Student Aid (FAFSA) at <https://studentaid.ed.gov/sa/fafsa>. Graduate fellowships and assistantships are awarded through the Graduate School and the respective academic departments.

Eligibility

Financial aid offers have eligibility requirements. Please see Financial Aid Terms and Conditions for specific award requirements. Visit <https://financialaid.fsu.edu/> for additional information.

Deadlines

The federal financial aid application period for the 2020-2021 year begins October 1, 2019 and ends June 30, 2021. Some federal and institutional grant funds and federal work-study funds are limited, so students are encouraged to apply as soon as possible after October 1, 2019.

This application is valid for Fall 2020, Spring 2021, and Summer 2021.

Financial Aid Application Process

To apply for federal, state, and institutional aid at Florida State University, students must complete the Free Application for Federal Student Aid (FAFSA). Students are encouraged to apply online at: <https://studentaid.ed.gov/sa/fafsa>.

To apply, the following materials will be necessary to complete the data required:

- The student's social security card and driver's license
- W-2 forms or other records of income earned
- Student's and student's spouse's (if married) Federal Income Tax Return

- Records of other untaxed income received, such as welfare benefits, social security benefits, TANF, and military or clergy allowances
- Current bank statements and records of stocks, bonds, and other investments
- Business or farm records, if applicable; and
- Student's alien registration card, if student is not a U.S. citizen.

Note: Students may apply for financial aid before being admitted to Florida State University, but while early application for aid is recommended (as soon as possible beginning October 1), a student cannot be offered aid until he/she is officially accepted for admission to Florida State University.

Loan Entrance Counseling Sessions and Master Promissory Note

Federal regulations require all students receiving a Federal Stafford Unsubsidized Loan or Graduate Plus Loan to participate in a loan entrance counseling session and endorse a master promissory note prior to receiving the first distribution of the loan. No Federal loan can be disbursed until this requirement is met.

A student accepting a loan award for the first time at Florida State University can complete the loan entrance and master promissory note requirement by accessing the Federal Department of Education Web site at <https://studentaid.gov/h/manage-loans> and clicking on the loan entrance counseling and master promissory note links. Students will need their Federal Student Aid ID (FSA ID) to access their profile. Students can obtain an FSA ID by visiting <http://fsaid.ed.gov>. The student will be asked to provide certain information, including reference addresses for future use. Students are strongly encouraged to print a copy of the completed confirmation page to retain for their records. The FSA ID is used to complete the e-signature. Students who prefer an alternative format or who have questions about loans, the loan entrance counseling, or master promissory note information process may contact the Office of Financial Aid.

Fees and Financial Aid Students

Financial Aid Payments & Refunds: When financial aid is processed to the student's account, the University first applies financial aid payments towards tuition and housing charges (and towards other charges as allowed) before issuing refunds. Financial aid is processed to accounts beginning with the published disbursement dates and continues through the semester. For more information and upcoming dates, visit <http://studentbusiness.fsu.edu/>. To receive your aid, you must comply with Financial Aid terms and conditions located at <http://financialaid.fsu.edu/Terms-and-Conditions>. You must also confirm that your financial aid file is complete prior to disbursement by checking your status and clearing any holds or to-do list items at <https://my.fsu.edu>. Financial aid refunds are sent by Electronic Funds Transfer (EFT) to any US-based bank account, so students must designate a refund bank account and enroll in direct deposit to receive a refund of excess Financial Aid or a refund of financial aid that cannot be applied to University charges. Additionally, the University must receive written permission to apply federal financial aid to charges other than tuition and housing and federal aid cannot be applied to excess-hours fees. For instructions on how to provide that permission, or for direct deposit enrollment instructions, see <http://studentbusiness.fsu.edu/>.

If you have any questions, please call (850) 644-9452 at the Office of Student Business Services. For financial aid questions, please contact the Office of Financial Aid at (850) 644-0539.

Deadline: If the financial aid payment is not sufficient (or allowed) to cover all charges, or if a student's schedule, university bill, or financial aid offer changes after application of financial aid, then the student is responsible for paying the balance by the tuition payment deadline, (see the "Academic Calendar" in the *Registration Guide*). After this date, a \$100.00 late payment fee is assessed and grades will be held at the end of the semester until fees are paid in full.

Note: Financial Aid students who are having their tuition paid by an agency, department billing, or Florida Prepaid College Program should submit the required documents no later than the third day of the semester (see the "Academic Calendar" in the *Registration Guide*). The basic Florida Prepaid College Program does not pay the full amount of tuition owed to the University, nor do Intern Participation Certificates. Students must pay the remaining balance due by the posted payment due date.

Deferments, Loans, and Check Cancellation

Deferments

Students must confirm their application is complete by the first week of the semester by going to <http://my.fsu.edu> and viewing their Financial Aid.

Students may qualify for a deferment or extension of the tuition due date if they are awarded financial aid that is not disbursed by the published tuition deadline. Students who have been awarded aid (and in the case of loans, have accepted aid) sufficient to meet their tuition cost and who have submitted all To-Do-List items, may receive an automatic extension of the tuition deadline if their aid is not disbursed by the published deadline. Students should review their Student Account Invoice after the end of Drop/Add and before the published tuition deadline to determine if all aid has been applied, or to check to see if the tuition deadline has been extended. If tuition is still owed by the initial published deadline and aid is still pending, students should contact the Office of Financial Aid prior to the tuition payment deadline.

Financial aid students who do not receive a financial aid deferment or extension must pay their tuition in full by the tuition payment deadline. See the dates published in the "Academic Calendar" included in the *Registration Guide*. Failure to pay by the published deadline will result in a late payment fee assessment.

Note: Financial aid deferments expire before the end of the semester. See the *Registration Guide* for the expiration date. Students must confirm that their financial aid has arrived, and all requirements have been met by the deferment expiration date. Go to <http://my.fsu.edu> (from *Student Account Quicklinks*, click *Account Statement*). You will then see your courses and fees detailed. With your temporary deferment, your total balance may show (\$0.00) for the Current Term Tuition. When your financial aid arrives, the screen will show how much has been paid toward your tuition. You must ensure that your financial aid pays your tuition in full by the deferment deadline. If you have questions, contact studentbusiness@fsu.edu or (850) 644-9452. If the student's financial aid is not available by the expiration date, it is the student's responsibility to pay tuition. Failure to pay by the expiration date will result in a late payment fee assessment of \$100.00, and your schedule for the next semester may be cancelled. Additionally, registration will not be permitted and transcripts and diplomas will not be mailed until debts are paid in full.

Short Term Loans

Students in need of funds as a result of financial aid being delayed may apply for a short-term loan (also known by the name delayed delivery loan) by contacting the Office of Financial Aid. Eligibility for the loan will be determined by the type of aid awarded and the hours enrolled. Accounts in delinquent status (past due) are not eligible for these loans. Short term loans will be disbursed approximately 1-2 business days after the loan has been approved and disbursed according to the disbursement method indicated on the student's disbursement permissions. Students must have either paid or deferred their full amount of tuition by the tuition payment deadline in order to be eligible for short term loans. Short term loans are due when the financial aid arrives, or by the financial aid deferment deadline, whichever comes first. Debts not paid will prohibit students from using University services such as registration, transcripts, etc.

Short term loans **are not available** until the financial aid distribution period. Students should come prepared to buy books and pay initial living expenses until financial aid disbursement.

Emergency Loans

Students who have a documented emergency situation such as eviction or utility cut-off may apply for an emergency loan at the Office of Financial Aid. Documentation and a picture ID are required to receive an emergency loan. Accounts in delinquent status are not eligible for an emergency loan. These loans must be paid by the due date, and University services will not be granted until paid in full. For emergency guidelines and requirements, contact the Office of Financial Aid.

Check Cancellation

Any Federal Direct Stafford Loan check available at financial aid distribution that is not disbursed by the check cancellation deadline will be returned to the lender for cancellation.

Loan Cancellation and Refusals

Students should notify the Office of Financial Aid to decline or refuse an awarded loan (Federal Loans, Private Loans, or Graduate Plus) prior to it being disbursed to the student. If the loan has already been disbursed and a student wishes to partially or fully refuse a loan, the student is required to notify the Office of Financial Aid and complete a cancellation form within fourteen days. The form can be completed at the Office of Financial Aid and repayment can be made to Florida State University by FSUCard, cash, cashier's check, or money order, or the original check can be brought to the Office of Student Business Services, *A1500 University Center*.

Loan Exit Interviews

Federal and University regulations require that all recipients of federal loans participate in an exit interview counseling session upon graduation, withdrawal from the University, or dropping below six semester hours. Counseling sessions can be completed online at <https://studentaid.gov/h/manage-loan>. For more information, contact the Office of Financial Aid at ofacs@fsu.edu or (850) 644-0539.

Additional Sources of Financial Support

Scholarship opportunities can be found on the FSU Scholarship Foundation FS4U, at <https://fsu.academicworks.com/>.

It is the student's responsibility to report all additional sources of financial aid via "Outside Aid" located at <http://my.fsu.edu> within the Financial Aid student portal.

The Federal Work Study Program (FWSP)

The FWSP is a federally funded, need-based financial aid program, administered by the Office of Financial Aid. This program enables students to earn a portion of their financial aid offer. This program offers a positive alternative to loan indebtedness through meaningful part-time employment. Weekly work schedules are mutually determined by the student and the employing department to suit the student's class/exam schedule and the employer's needs. According to federal regulations, the work schedule cannot interfere with a student's class schedule.

Students may also utilize their Federal Work Study offers by participating in community service through the **Community Service Work Study Program (CSWSP)**. This program is designed to locate and develop off-campus community service jobs and offer referrals for eligible students. Students may assist with programs related to health care, childcare, literacy training, education (including tutoring), welfare, and social services. Some students may serve as mentors for educational and recreational activities or work as counselors in areas such as career counseling.

To determine eligibility for the FWSP and CSWSP, students must apply for financial aid at Florida State University by completing the *Free Application for Federal Student Aid (FAFSA)*, and by submitting all other required documentation.

Graduate Fellowships

There are a variety of fellowships offered through the University. Some require duties and some do not. Students should check with their graduate department for awards available in their discipline or visit <http://www.grad-school.fsu.edu>.

1. **The Graduate School Legacy Fellowship.** For newly admitted doctoral and MFA students in certain fields. The fellowship is awarded as a \$10,000 supplement to departmental/college assistantship offers. It is a multi-year award and includes tuition waivers and the health subsidy benefit.
2. **Henderson Family Fellowship.** This fellowship supports Florida public school teachers who are pursuing a master's or specialist degree. This fellowship defrays the costs of tuition and fees for up to two semesters in an academic year (Summer, Fall, Spring).
3. **McKnight Doctoral Fellowship Program.** This is a state-wide program administered through the Florida Education Fund (FEF) designed to address the under-representation of African American and Hispanic faculty at colleges and universities in the State of Florida by increasing the pool of citizens with doctoral degrees. The McKnight Doctoral Fellowship provides an annual stipend of \$12,000 plus in-state tuition and fees for a maximum of five years for newly enrolling African American and Hispanic graduate students who intend to seek a PhD degree. This award may supplement an award from an academic unit (research and teaching assistantships).
4. **McNair Scholars Fellowship.** The McNair Scholars program is a federally-funded program that prepares first generation or underrepresented undergraduate students for doctoral studies. This fellowship is for newly-admitted doctoral or MFA students who completed the McNair Scholars program at a federally recognized institution. This fellowship provides a fellowship stipend between \$16,000 and \$20,000 annually and includes tuition waivers and the health insurance subsidy.
5. **FAMU Feeder Fellowship.** This fellowship is for students that graduated from Florida A&M University and completed the FAMU Feeder program. Awards will be given for a maximum of four years for doctoral degree-seeking students, and two years for master's degree-seeking students. The award will have a non-duty stipend of \$7,800 for each of

the Fall and Spring semesters, no Summer funding will be provided. The Graduate School will also provide a twelve credit hour tuition waiver for each of the Fall and Spring semesters along with the annual health insurance subsidy. The award may supplement an award by the academic unit or other entity if allowed.

6. **Dissertation Research Grants.** The Dissertation Research Grant is an award up to \$1,000 paid by the Graduate School to assist doctoral students with expenses associated with research necessary to prepare dissertations.

External Fellowships

The **Office of Graduate Fellowships and Awards** operates under the auspices of the Graduate School. The office assists currently enrolled graduate students in identifying and applying for nationally competitive fellowships and awards from external sponsors. Students receive advice and guidance on preparing and submitting competitive applications materials and proposals. For more information, visit the office's Web site at <http://ogfa.fsu.edu>.

Graduate Assistantships

Graduate students appointed as graduate assistants are selected by academic departments for duties connected with instruction, research, or professional activities of mutual benefit to the University and the student. Such students must be appointed in one of the following codes to be recognized as a graduate assistant: M9182, M9184, N9185, W9185, Z9185. Only students with regular graduate student status are eligible for appointment on a graduate assistantship. Special and provisional students are ineligible.

Application for a graduate assistantship should be made to the chair of the major department. The stipend varies depending on the amount of service rendered, the nature of the service, and the qualifications of the student.

Graduate assistants may be eligible for a waiver of the out-of-state tuition and matriculation fees. Refer to the previous section on "Tuition Waivers, Deferments, and Financial Arrangements" for details.

A new student whose application for an assistantship is under consideration must also complete an application for admission through the Office of Admissions in the usual manner.

To remain eligible for an assistantship, a student must discharge the assigned duties satisfactorily as determined by the director of the program. A graduate student with less than a 3.0 cumulative grade point average is not allowed to continue more than one term as a graduate assistant.

The **Leslie N. Wilson-Delores Auzenne Assistantship** is available for all new or currently enrolled minority graduate students. Nomination is through the department or college, but competition for these awards is on a University-wide basis. The stipend is a minimum of \$5,000 per academic year plus tuition waivers. Assistants also receive the health insurance subsidy benefit.

UNIVERSITY-WIDE STANDARDS FOR GRADUATE TEACHING ASSISTANTS AT FLORIDA STATE UNIVERSITY

These are University-wide standards that any graduate student must meet prior to assuming one of the various instructional roles. These are meant to be University-wide minimum standards; departments may adopt additional or more stringent standards. Programs that do not use graduate students in instructional roles would not be affected by these standards. They are meant to cover the formal use of graduate teaching assistants in course instruction. Extra help sessions and voluntary tutorials in addition to regular class meetings would not normally fall under these requirements. The companion policy, *University-Wide Standards for Undergraduate Teaching Assistants at Florida State University*, details the policies that apply to the use of undergraduates as teaching assistants.

Certification of General Teaching Competence

Each semester in accordance with guidelines of the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and the standards outlined in the following sections, the Academic Dean of each College is required to certify in writing to the Vice President of Faculty Development and Advancement and the Dean of The Graduate School that each graduate student who serves as a graduate teaching assistant (TA) in the classroom or online is competent to teach and for international graduate teaching assistants (ITA), that they are also competent to teach in spoken English. (See SACS statement below.)

NOTE: Colleges/units need to validate that each TA is serving their designated instructional assignment in the classroom before certifying to the Vice President of Faculty Development and Advancement and the Dean of The Graduate School that the TA certification process is complete. TAs serving as the instructor of record (IOR) for an undergraduate-level course need to be qualified to serve in this role prior to the start of the semester, appointed under the correct job code (M9184), and assigned to the course in Student Central. Students who do not meet the criteria for certification should not be appointed as a TA, serve as the instructor of record for any undergraduate-level course, or receive access to a Canvas site.

General

Administrative responsibility for the teaching assignment rests within the department in which the student is employed as a graduate teaching assistant (TA). Each department is responsible for providing orientation, training, supervision, and evaluation of its graduate student TAs, and for assigning a faculty member to work closely with the individual graduate student to assist him or her in carrying out teaching responsibilities and to facilitate professional development. There should be a departmental orientation for TAs prior to beginning their teaching responsibilities. It is also recommended that all TAs attend the PIE Teaching Conference sponsored by the Program for Instructional Excellence (PIE) before beginning their teaching responsibilities.

It is recommended that each program have a discipline-specific teaching manual for its graduate teaching assistants to supplement the University teaching manual, *Instruction at FSU*, which may be viewed online at <https://odl.fsu.edu/sites/g/files/upcbnu2391/files/media/1%40FSU.pdf>.

Graduate Assistantship Job Code

To monitor compliance with University policies and Fair Labor Standards Act (FLSA) requirements, it is imperative that the proper appointment classifications be used for graduate teaching assistants. It is the responsibility of departments that employ graduate teaching assistants to establish the appropriate job code according to teaching responsibility. The Graduate School and the Human Resources Office will verify the requirements for each classification and are the offices to contact if there are any questions. Job codes to be used for graduate students can be accessed at http://hr.fsu.edu/PDF/Forms/compensation/OPS_Job_Codes.pdf. As a general rule:

- Levels 1 and 2:
 - W9185 Graduate Assistant (Teaching) – Stipend (FLSA Exempt)

This Graduate Assistant shall be classified as a degree-seeking graduate student who assists in the teaching function, but does **NOT** have primary responsibility for teaching. The appointee must be fully admitted to and meet the requirements of the University, be fully admitted to a graduate degree program, and be under the supervision of a faculty member. Examples: Graders, tutors, recitation leaders, lab supervisors, assistant to faculty instructor.

- Levels 3 and 4:
 - M9184 Graduate Teaching Assistant – Stipend (FLSA Exempt)

This Graduate Teaching Assistant shall be classified as a degree-seeking graduate student who has a master's degree in the teaching discipline or at least eighteen graduate semester hours in the teaching discipline and performs primary teaching duties as the Instructor of Record (IOR) that are related to that student's academic program. The appointee must be admitted to and meet the requirements of the University, be fully admitted to a graduate degree program, and be under the supervision of an appropriate faculty member. Example: A graduate student having full instructional responsibilities for a credit class.

Minimum Requirements for Different Levels of Instruction

TA level types 1 and 2 presume the graduate teaching assistant is performing instructional duties for undergraduate students ONLY. This involves limited direct contact with undergraduate students. Under no circumstances, should a graduate TA be allowed to grade, tutor, proctor, lead recitation/discussion sections, etc. for a graduate student.

Level 1. This level may include a variety of duties, but assignments cannot involve routine direct contact with a group of undergraduate students in face-to-face or online instructional support roles. Limited one-to-one engagement e.g., office hours are permissible. Examples include grading, the setup of laboratory demonstrations, and course management. If routine instructional contact support with a group of undergraduates is expected, then the Teaching Assistant must meet the English language competency standard required for a Level 2 appointment.

Requirements:

- Program specific guidelines for the specific duties
- Undergraduate degree in discipline or related field
- Some graduate work completed or enrolled in
- Must attend day one of the Fall PIE Teaching Conference before the commencement of one's teaching duties. Day one includes required training on the Sexual Harassment Policy, Academic Honor Policy and the Federal Educational Rights and Privacy Act (FERPA). Day one also includes training in the use of Canvas for instruction, time management for Teaching Assistants, and interacting professionally with one's students. Equivalent preparation offered by the academic unit (that has been approved by the Graduate School) may be substituted for day one of the Fall PIE Teaching Conference. This alternative must include training in the specific policies noted above.
- Supervision by a faculty member in the teaching discipline
- Planned and periodic evaluations of the teaching assistant

Level 2. This level assumes a greater degree of interaction with undergraduate students than Level 1 and thus requires a higher level of competency in spoken English. This level includes a variety of duties e.g., grading, tutoring, proctoring of computerized exams and laboratories, assisting with laboratory sections, leading recitation and discussion sections.

Requirements:

- Program specific guidelines for the specific duties
- Undergraduate degree in discipline or related field
- Some graduate work completed or enrolled in
- Must attend day one of the Fall PIE Teaching Conference before the commencement of one's teaching duties. Day one includes required training on the Sexual Harassment Policy, Academic Honor Policy and the Federal Educational Rights and Privacy Act (FERPA). Day one also includes training in the use of Canvas for instruction, time management for Teaching Assistants, and interacting professionally with one's students. Equivalent preparation offered by the academic unit (that has been approved by the Graduate School) may be substituted for day one of the Fall PIE Teaching Conference. This alternative must include training in the specific policies noted above.
- Supervision by a faculty member in the teaching discipline
- Planned and periodic evaluations of the teaching assistant

Note: The distinction of Levels 1 and 2 recognizes that the extent of interaction with undergraduates, and thus the necessary spoken English competency of the TA, varies across disciplines though the position title is the same.

TA level types 3 and 4 presume the graduate teaching assistant is the Instructor of Record (IOR) for an undergraduate course section ONLY. Normal policy forbids a graduate TA from being the IOR and teaching a graduate course. This includes co-listed sections.

Level 3. Lower-level undergraduate courses (1000–2000 level)

Requirements:

- A minimum of eighteen hours of graduate work in the teaching discipline
- Must attend days one and two of the Fall PIE Teaching Conference before the commencement of one's teaching duties or an equivalent offered by the academic unit (that has been approved by the Graduate School). Days one and two of the Fall PIE Teaching Conference address the following policies which are required at this level: Sexual Harassment Policy, Academic Honor Policy, the Federal Educational Rights and Privacy Act (FERPA), American with Disabilities Act (ADA), Grading Policies, Textbook Adoption Procedure Policy, Syllabus Policy, Class Attendance Policy, Final Exam Policy, Copyright Law Regulations (Copyright Revision Act of 1976 "fair use"), and Course Evaluation Policy. Days one and two also include training in a number of topics that are of value to instructors e.g., the use of Canvas for instruction, time management for Teaching Assistants, interacting professionally with one's students, dealing with distressed students, diversity in the classroom, grading and assessment.

Note: Alternative "equivalent training" that is provided by an academic unit must include training in the specific policies indicated above.

- Student participation in a "teaching in the discipline" course or equivalent academic unit orientation
- Direct supervision by a faculty member in the teaching discipline
- Planned and periodic evaluations of the teaching assistant

Level 4. Upper-level undergraduate courses (3000–4000 level)

Requirements:

- Master's degree or at least thirty hours of graduate coursework in the teaching discipline
- Must attend days one and two of the Fall PIE Teaching Conference before the commencement of one's teaching duties or an equivalent offered by the academic unit (that has been approved by the Graduate School). Days one and two of the Fall PIE Teaching Conference address the following policies which are required at this level: Sexual Harassment Policy, Academic Honor Policy, the Federal Educational Rights and Privacy Act (FERPA), American with Disabilities Act (ADA), Grading Policies, Textbook Adoption Procedure Policy, Syllabus Policy, Class Attendance Policy, Final Exam Policy, Copyright Law Regulations (Copyright Revision Act of 1976 "fair use"), and Course Evaluation Policy. Days one and two also include training in a number of topics that are of value to instructors e.g., the use of Canvas for instruction, time management for Teaching Assistants, interacting professionally with one's students, dealing with distressed students, diversity in the classroom, grading and assessment.

Note: Alternative "equivalent training" that is provided by an academic unit must include training in the specific policies indicated above.

- Student participation in a "teaching in the discipline" course or equivalent academic unit orientation
- Direct supervision by a faculty member in the teaching discipline
- Planned and periodic evaluations of the teaching assistant

Certification of Spoken English for Graduate Teaching Assistants

As noted above, Academic Deans are required to certify to the Vice President of Faculty Development and Advancement and the Dean of The Graduate School that the TAs in the college are competent to teach. This statement should also include certification that all graduate TAs whose native language is not English are competent to teach in spoken English.

All international graduate students who are not native speakers of English, and who are going to be TAs, should take the SPEAK test when they arrive on campus (as noted below, students who scored 26 or higher on the speaking portion of the TOEFL iBT may be exempted from taking the SPEAK test). The Center for Intensive English Studies (CIES) administers and scores the SPEAK test, CIES also offers courses in spoken English (EAP courses). The SPEAK test is administered several times in the week(s) prior to the beginning of each semester, and the scores are available within three to four days of the date the test is administered. Departments are

urged to take advantage of this opportunity to receive an initial estimate of speaking ability. In addition, the SPEAK test is routinely administered as an end-of-term evaluation for students enrolled in EAP courses. TAs not enrolled in EAP courses may also take the test at that time. Course offerings, as well as test dates for SPEAK tests, are published in fliers distributed periodically to departments, as well as via e-mail to TA coordinators. This information is also available on the CIES Web site at <http://www.cies.fsu.edu>.

The standards for certification of spoken English are as follows:

- A score of 50 or higher on the SPEAK test, or 26 or higher on the speaking portion of the IBTOEFL, certifies a student to teach at all levels.
- A score of at least 40 on the SPEAK test is acceptable for a TA appointed at Level 1. Appointment at this level is appropriate if there is no or limited direct contact with undergraduate students, e.g., is responsible for grading tests and/or only providing direct support to an instructor. If there is to be any routine direct communication with a group of undergraduate students, whether face-to-face or online, the higher standard applies. Limited one-to-one engagement, e.g., office hours is permissible.
- A score of 45 on SPEAK, or 23-24 on the Speaking section of TOEFL iBT, certifies a TA to teach at Level 1 and Level 2 for up to two semesters if also concurrently enrolled in an appropriate CIES English language course. If, by the end of these two semesters, the student's skills have not improved sufficiently to achieve a score of 50 on the SPEAK exam, the student will be eligible to teach only at Level 1. The student will be allowed to teach at levels 2–4 by meeting at least one of the following two criteria:
 - Achieve a score of 50 on SPEAK.
 - Enroll in Advanced Spoken English for ITAs (EAP 4831) and score 90 or better in the course.
- Student's scoring 40 or below on SPEAK should enroll in the appropriate CIES English language course(s) if the goal is to teach at Levels 2-4. Once a 45 on SPEAK is achieved such a student will be certified to teach at Level 2 for up to two semesters if also concurrently enrolled in an appropriate CIES English language course. If, the end of these two semesters, the student's skills have not improved sufficiently to achieve a score of 50 on the SPEAK exam, the student will be eligible to teach only at Level 1. The student will only be allowed to teach at levels 2–4 by meeting at least one of the following two criteria:
 - Achieve a score of 50 on SPEAK.
 - Enroll in Advanced Spoken English for ITAs (EAP 4831) and score 90 or better in the course.
- The standard for international students serving as ITAs in Modern Languages and Linguistics is 45 (SPEAK) or 23 (TOEFL) if the student is teaching a course in their native language.

Exceptions

In general, if new graduate students are unable to attend the Fall PIE Teaching Conference prior to commencing their first semester of teaching they may only be appointed at Level 1. However, prior to the commencement of their teaching duties, they must complete the online required policy modules (Sexual Harassment Policy, Academic Honor Policy, and the Federal Educational Rights and Privacy Act (FERPA)) that are available through the Program for Instructional Excellence or undergo equivalent preparation offered by the academic unit (that has been approved by the Graduate School). If equivalent preparation is not available and if they are to continue teaching in the Spring or Summer and thereafter, they must attend the Spring PIE Teaching Workshop which is held the Friday of the first week of classes. Ultimately, they must participate in training through one of the PIE options or through the academic unit in order to continue to serve as a Teaching Assistant.

If a student's first semester of enrollment is Spring and they are to be assigned teaching responsibilities, they must complete the required online training modules and attend the PIE Spring Teaching Workshop or an academic unit equivalent (that has been approved by the Graduate School). In unique instances a Department Chair or Dean may appeal the application of these standards by submitting a request to the Dean of The Graduate School.

Equivalent Previous Experience and Emergencies

With the exception of the minimum of eighteen hours of graduate coursework in the teaching discipline for primary instruction and in accordance with guidelines provided by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC), the following options will be available to deal with special circumstances:

- A graduate student who through previous preparation or teaching experience has demonstrated knowledge and strong teaching skills can be exempt from some of the requirements, as appropriate, by certification of the program chair.
- In an emergency, a department may appoint a graduate teaching assistant who has not met all the University-wide requirements for that level of appointment if there is an assurance that the student will meet the requirements by the end of the term in which the student is teaching.

Instructor of Record (IOR) Policy

FSU defines the “instructor of record” as the individual designated by the academic unit as responsible for a course, including developing its design, delivery, assignments, and assessments. All instructors of record, regardless of rank or type, must meet the appropriate standards for credentials and appointment. (FSU Policy 3A-6)

Normal policy forbids graduate students from serving as an instructor of record and teaching a graduate course. This includes co-listed sections. Exceptions can be made by requesting approval from the Vice President for Faculty Development and Advancement through the Dean of the Graduate School. Please refer to *FSU's Faculty Handbook (Section 5, under Graduate Teaching Status)* for more information on this.

SACS Statement

Graduate teaching assistants: master's degree in the teaching discipline or eighteen graduate semester hours in the teaching discipline, direct supervision by a faculty member experienced in the teaching discipline, regular in-service training, and planned and periodic evaluations. [Reference: Commission on Colleges, Southern Association of Colleges and Schools (SACS); Commission guidelines “Faculty Credentials” (Adopted Dec. 2006)].

Sexual Harassment, Academic Honor Policy, and FERPA Policies and Equivalency

University policy on sexual harassment training is provided by the Office of Equal Opportunity and Compliance (EOC) within Human Resources (<http://www.hr.fsu.edu>), the Academic Honor Policy training is offered by the Office of the Vice President of Faculty Development and Advancement (<http://fda.fsu.edu>), and FERPA training is offered by the Office of the University Registrar (<http://registrar.fsu.edu>). These offices provide training at the Fall PIE Teaching Conference. In addition, PIE offers online modules for those students who are unable to attend the Fall PIE Teaching Conference or who begin their enrollment in the Spring or Summer semesters.

Program for Instructional Excellence Conference and Workshops

The Program for Instructional Excellence (PIE) supports and complements departmental TA training programs. To prepare TAs for immediate undergraduate classroom responsibilities, PIE conducts an annual two-day teaching conference the Wednesday and Thursday before classes start in the Fall semester. The conference is free to participants and focuses on policies and services at FSU as they relate to teaching. PIE offers a shorter orientation during the first week of the Spring semester to accommodate new students. Additionally, PIE offers workshops on teaching during the Fall, Spring, and Summer semesters and an online training series called the “Basics of Teaching @ FSU”. PIE also assists departments in developing TA departmental training programs. The Graduate School is responsible for collating and validating PIE-equivalent training options provided by academic programs.

GRADUATE HOUSING

Executive Director of University Housing: Shannon Staten, *109 Student Life Building*

Residence Halls

The **Office of University Housing** is responsible for all on-campus housing facilities. The office provides living accommodations for full-time, degree-seeking, fee-paying students. All assignments are made without regard to race, religion, sexual orientation, or national origin. Some rooms and apartments are adapted for residents who have physical disabilities.

University facilities on the main campus include four apartment buildings with varying bedroom/bathroom and roommate configurations that are available for unmarried students. Most residents are undergraduates, but a limited number of rooms are reserved for single graduate students.

Halls	Apartment Type	Students per Bedroom
McCollum	2 bedroom / 1 bath	2
	1 bedroom / 1 bath	1
Ragans	3-4 bedroom / 2 bath	1
Rogers	1 bedroom / 1 bath	2
Traditions	2 bedroom / 1 bath	1

For the security of the residents, entrances to residence hall apartments are locked at all times. Residents must use keys to enter, and visitors must be escorted by a resident at all times in the building.

Costs

McCollum, Ragans, Rogers, Traditions Halls

Semester rate includes utilities, mail service, wired and wireless Internet, cable, and a refrigerator. Rental rates and payment due dates are provided on the University Housing Web site at <http://housing.fsu.edu>.

Note: All housing rental fees are established by Florida State University and are subject to approval by the State Board of Education. University Housing is a self-supporting auxiliary, and rental rates must reflect operating costs.

Contracts

Students may submit a contract for housing after notice of admission. The housing contract is available at <http://housing.fsu.edu>.

As space is limited, interested students are urged to submit their contracts as quickly as possible. Assignments are made on a priority basis: 1) returning residents—based on the number of completed credit hours on file in the Office of the University Registrar and 2) all new residents—based on the date the contract is submitted. Although graduate student spaces are typically in the buildings listed above, an assignment could be made in a different building based on space available.

The terms and conditions of occupancy are for the contract period for the semester(s) for which the student contracts. All students who submit the Housing Contract and enroll in the University are rent obligated for the period of the contract. Academic year contracts include both Fall and Spring semesters and are not eligible for cancellation except as stated in the contract terms and conditions.

Other Options

Students who are unable or choose not to live in University housing have several housing options. A considerable number of apartments and homes located near campus are available for rent through local real estate agencies and private owners.

The **Off-Campus Housing Office**, a Student Government funded agency, serves as an information center, assisting students who seek off-campus housing. The office maintains a list of area houses, apartments, and private residence halls. The information available includes rental cost, deposit, distance from campus, lease terms, and amenities.

COLLEGE OF APPLIED STUDIES

GRADUATE

Dean: Randall Hanna; **Associate Deans:** Amy Polick, Irvin Clark

Established in 2010, the College of Applied Studies is one of the newest colleges at the University. The administrative offices of the College of Applied Studies are located on the Panama City campus, which is about one hundred miles southwest of Tallahassee, on beautiful North Bay.

Advising

Graduate students at Florida State University Panama City work closely with the professors of their academic programs and receive academic and career advising directly from faculty. Master's students should consult regularly with their supervising professor about progress toward the degree.

Graduate Programs

The College of Applied Studies currently offers the following graduate programs:

- MS in Corporate and Public Communication
- MS in Law Enforcement Intelligence
- MS in Nurse Anesthesia

Plans are underway for additional programs that will serve the needs of the local and online community. For the latest information on new programs, visit the college's Web site at <http://pc.fsu.edu/academics/college-applied-studies>.

Certificate Programs

In addition to degree programs, the College of Applied Studies offers certificate programs that provide specialized areas of emphasis. The certificate programs offered include:

- Graduate Certificate in Underwater Crime Scene Investigation
- Graduate Certificate in Law Enforcement Intelligence

Additional information regarding the certificate programs may be found at <http://pc.fsu.edu/academics/college-applied-studies>.

Facilities

The College of Applied Studies is housed in seven buildings on the Panama City campus. The campus occupies just over twenty-five acres. The most recent additions to the campus are a \$7.9 million Administrative Services Center and a \$32 million Holley Academic Center. The 14,000-square-foot Administrative Services Center, completed in March 2007, houses the police department, postal services center, maintenance department, and receiving area, as well as the central utility plant for the entire campus. The Holley Academic Center is the largest and most central building on campus. The Holley Center is a three-story facility in excess of 100,000 square feet and it houses twenty-one general purpose classrooms, a digital design studio, student success center, veteran's ready room, advising center, student seminar rooms, study and meeting rooms, a library and learning center, a 500-seat multi-purpose lecture hall/community room, and ten academic/computer laboratories in support of programs in public safety and security, civil and environmental engineering, computer science, electrical engineering, advanced scientific diving, and underwater crime scene investigation. The Holley Academic Center was named in recognition of Russell C. Holley's naming gift in honor and memory of his parents.

COLLEGE OF ARTS AND SCIENCES

GRADUATE

Dean: Sam Huckaba; **Associate Deans:** Robert Contreras, Lois Hawkes, Timothy Logan, Jeanette Taylor

The oldest college at the University, the College of Arts and Sciences has provided generations of undergraduate students instruction in the liberal arts disciplines that are essential for intellectual development and personal growth. Graduate degree programs in the College of Arts and Sciences grew organically from these strong undergraduate roots, and the contributions of the college to graduate education have been integral to the evolution of the University. The first recorded Master's degree at the Florida State College for Women was awarded by the College of Arts and Sciences in 1908, and the first doctorate at Florida State University was awarded in Chemistry in 1952.

The College of Arts and Sciences comprises over thirty departments, institutes, centers, and interdisciplinary programs. In addition to awarding bachelor's, master's, and doctoral degrees and heavily supporting the Liberal Studies for the 21st Century Program, the College of Arts and Sciences offers an extensive array of foundation courses for pre-professional and professional programs.

Faculty within the college have earned national and international recognition for research, teaching, and distinguished service to the profession. Among the faculty are members of the National Academy of Sciences, Nobel Laureates, a Pulitzer Prize winner, and recipients of numerous other national and international honors.

Graduate students within Arts and Sciences have received marks of distinction that include local, national, and international scholarships and fellowships.

Opportunities

Departments in the College of Arts and Sciences work with various programs, schools, and colleges to offer cooperative and interdisciplinary degree programs at the graduate level. Well-funded research opportunities for graduate students are extensive among the science departments.

Scholarships, Awards, and Assistantships

Many students are supported by graduate teaching or research assistantships which are available across the college. In addition to being eligible for the assistantships, students in the College of Arts and Sciences may apply for various types of graduate fellowships. Fellowship opportunities are available through The Graduate School. The application deadline for most fellowships is mid-January for awards beginning the following academic year.

Requirements

The College of Arts and Sciences offers the master of arts (MA), the master of fine arts (MFA), the master of science (MS), professional science masters (PSM), and the doctor of philosophy (PhD) degrees. In addition to reviewing the requirements highlighted below, students should consult all University-wide degree requirements and academic procedures for the master's and doctoral degrees as summarized in the "Graduate Degree Requirements" chapter of this *Graduate Bulletin*.

Admissions Criteria

Students who wish to pursue graduate study in the College of Arts and Sciences must apply through the Office of Admissions and must be accepted for graduate study by the intended department or program. The applicant must have an earned bachelor's degree with a minimum upper division 3.0 GPA (on a 4.0 scale) or have earned a graduate degree. All applicants must submit test scores from a nationally standardized graduate admissions test that is acceptable to the program to which they are applying. Prospective graduate students who are foreign nationals must also earn a minimum score of 550 on the paper-based or 80 on the Internet-based TOEFL examination, 6.5 on the IELTS examination, or 77 on the MELAB examination. Individual departments and programs may set higher standards for admission. For more detailed information about specific graduate programs in the College of Arts and Sciences, students should consult departmental or program entries of this *Graduate Bulletin*.

Limitations on Supervised Teaching and Research Coursework

Students may be granted credit for supervised research and supervised teaching at the option of their department. A student may register for such activity in more than one term. No more than five semester hours of supervised

research credit and five semester hours of supervised teaching credit may be counted toward the master's degree. The normal limit for candidates for doctoral degrees is five semester hours in each category.

Master's Degree Requirements

Master's degree students must complete their program of study within seven calendar years from the time of initial registration. A thesis-type master's program requires a minimum of thirty semester hours, six of which must be thesis credits. A course-type master's program also requires a minimum of thirty semester hours. A student who enrolls in thesis hours need not be enrolled continuously thereafter in thesis hours if they meet the minimum University requirement for full-time or part-time enrollment through other coursework. The minimum number of thesis hours required for the master's degree is six. Students who have left the campus must register for at least two semester hours of thesis credit per term as long as they are receiving faculty supervision. Master's students should consult regularly with their supervising professor about progress toward the degree.

Doctoral Degree Requirements

Doctoral students must complete their degree requirements within five calendar years from the time the preliminary examination is passed. No student may register for dissertation hours prior to the point of the term in which the preliminary exam was passed. Dissertation hours may be added retroactively during the term in which the preliminary exam is passed, provided that an Admission to Candidacy Form has been filed with the Registrar during the same semester. Retroactive changes are only permitted if the preliminary exam is passed by the end of the 7th week of the semester. See the "Academic Calendar" in the *Registration Guide* for semester-specific deadlines. A minimum of twenty-four dissertation hours is required for completion of the doctoral degree. Students admitted to doctoral candidacy must register for a minimum of two dissertation hours each term in which any work is being done on the dissertation, even after the minimum of twenty-four dissertation hours has been met. Students who are off campus must also register for at least two semester hours of dissertation each term in which they receive faculty supervision or make use of university resources.

To meet the Scholarly Engagement requirement, doctoral students should interact with faculty and peers in ways that may include enrolling in courses, attending seminars, symposia, and conferences; engaging in collaborative study and research beyond the university campus; and utilizing the library, laboratories, and other facilities provided by the University. The goal is to prepare students to be scholars who can independently acquire, evaluate, and extend knowledge, as well as develop themselves as effective communicators and disseminators of knowledge. The purpose of the Scholarly Engagement requirement is to ensure that doctoral students are active participants in the scholarly community. Each academic unit with a doctoral program should include a program-specific statement in its Graduate Handbook describing how its students can meet the Scholarly Engagement requirement.

Effective with all committees appointed after August 24, 2009, the PhD supervisory committee must meet the new minimum university standard of four members with Graduate Faculty Status (GFS). Included among these four members will be the University Representative who must hold not only GFS, but also be a tenured faculty member. Annually, this committee will assess in writing the progress of the student, making copies of its report available to the Dean of the Graduate School, department chair, and the student's academic dean (Dean of the College of Arts and Sciences). Within a week of the dissertation defense, the University representative must file with the Dean of the Graduate School and the student's academic dean (Dean of the College of Arts and Sciences) a report on the dissertation and adherence to University procedures governing the defense.

Final Term Registration

Students must register for at least two semester hours of thesis or dissertation credit in the final term in which a degree is granted. Non-thesis type master's program students who have not previously registered for the comprehensive examination must do so in the final term.

Clearance for Degrees

Early in the semester in which the candidate intends to graduate, the student must formally apply for graduation through the Office of the University

Registrar's Web site. Those writing theses or dissertations must submit additional paperwork to the Graduate School. The completed thesis or dissertation manuscript must be submitted to the Graduate School by the official University deadline in order for the student to graduate that term.

COLLEGE OF BUSINESS

GRADUATE

Dean: Michael D. Hartline; **Associate Dean for Academic Programs:** Kathleen A. McCullough; **Associate Dean for College Operations:** J. Dennis Cradit

The College of Business is one of a select group of business programs in the country fully accredited by The Association to Advance Collegiate Schools of Business (AACSB). This accreditation includes all undergraduate, master's, and doctoral programs in business and separate accreditation of the bachelor's and master's programs in accounting.

Since its beginning in 1950, the College of Business has developed into a major unit that provides quality business education for students employed in regional and national organizations. The faculty and programs of the college are committed to educating and developing future business leaders and executives. This commitment to quality is reflected in three essential areas: a talented and dedicated faculty, an outstanding student body, and a close relationship with the business community. Over the years, the College of Business has been successful in building a very capable and motivated business faculty. Faculty members throughout the several business disciplines are very productive researchers and effective teachers. These faculty members also maintain important contacts with the business community through various types of service and applied research activities.

As a result of capable and dedicated faculty, the College of Business has been able to attract highly qualified students. Business students have strong analytical and communicative aptitudes and have a spirit of enterprise and creativity. The interaction of these types of students with highly qualified business faculty, coupled with well-designed business program options, creates a stimulating learning environment.

Lastly, the achievements of the College of Business have been recognized by the business community in the form of development funds for scholarships, endowed chairs, professorships, teaching and research grants, and other program activities.

Programs Offered

The College of Business offers curricula leading to the following:

- Master of Business Administration (MBA)
- Master of Accounting (MAcc)
- Master of Science in Finance (MSF)
- Master of Science in Business Analytics
- Master of Science (MS) in Risk Management-Insurance
- Master of Science (MS) in Management Information Systems
- Doctor of Philosophy (PhD) in Business Administration.

The **Master of Business Administration (MBA)** program is offered in three formats: 1) part-time evening, on-campus; 2) part-time, online; and 3) full-time, on-campus. The part-time evening on-campus program and part-time online program can be completed in twenty-eight months by taking two evening or online courses each semester. The full-time, on-campus program can be completed in one year (three semesters) starting in the fall (late August) semester. The MBA program incorporates nine core courses aimed at strengthening managerial skills and four electives to tailor the MBA curriculum to suit specific careers. Electives may be chosen from other areas in the College of Business with approval of the Associate Dean for Academic Programs.

The **Master of Accounting (MAcc)** program is designed to allow the student to major in either Assurance and Advisory Services, Generalist, or Taxation. This program provides students with greater breadth and depth in accounting education than can be accomplished in the baccalaureate program. Although the MAcc program is designed as a full-time program, students may choose to complete their coursework on a part-time basis.

The **Combined Bachelor of Science in Accounting/Master of Accounting (BS/MAcc) Pathway** allows Florida State University students majoring in accounting to streamline their studies. Admitted students are able to register for up to nine semester hours of graduate courses that count towards both the BS and MAcc degrees during their senior year. Students admitted to the combined BS/MAcc pathway will still be required to apply separately to the Master of Accounting (MAcc) program.

The **Master of Science in Finance (MSF)** program is a one year, lock-step, full-time, on-campus program that emphasizes the applied aspects of finance. The MSF program also offers a specialization in real estate finance and investment in which students focus on real estate finance courses instead of risk management and investment or international banking courses.

The **Combined Bachelor of Science in Real Estate/Master of Science in Finance (BS-RE/MSF) Pathway** allows Florida State University students ma-

joring in real estate with a strong combination of advanced analytical skills in finance and real estate to compete for positions emerging within leading companies. Admitted students are able to register for up to nine semester hours of graduate courses that count towards both the BS-RE and MSF degrees during their senior year. Students admitted to the combined BS-RE/MSF pathway will still be required to apply separately to the Master of Science in Finance (MSF) program.

The **Master of Science in Business Analytics (MS-BA)** program was developed to address the need for specialized training in business analytics. The MS-BA program is a full-time, on-campus program with entry occurring in the summer semester. The program is designed so that students can complete the degree in three semesters.

The college also offers an Internet-based **Master of Science in Management Information Systems** program. The program is designed so that a typical student can complete the degree in twenty-four months by taking two online courses each semester.

The **Master of Science in Risk Management-Insurance** program is available entirely via the Internet and is designed for working professionals. This program can be completed in twenty-four months by taking two online courses each semester.

The objective of the doctoral program in business is to prepare students for careers in university research and teaching, as well as for selected administrative and research positions in industry and government. Students receive the **Doctor of Philosophy in Business Administration** degree and concentrate in accounting, finance, management information systems, marketing, organizational behavior and human resources, risk management and insurance, or strategy.

More specific information on all our graduate programs is available on the College of Business Web site at <https://business.fsu.edu/graduate>.

The College of Law and the College of Business offer a joint graduate pathway leading to the Juris Doctor (JD) and the Master of Business Administration (MBA) degrees. The College of Social Work and the College of Business offer a joint graduate pathway leading to the Master of Social Work (MSW) and the Master of Business Administration (MBA) degrees.

Institutes and Centers

The **Jim Moran Institute for Global Entrepreneurship (JMI)** in the College of Business at Florida State University serves to help entrepreneurs with currently existing businesses in the state of Florida to succeed. The JMI offers many avenues of assistance—from educational conferences to direct connections with our knowledgeable staff. As the prospect of operating a business in the future becomes more and more complex, the JMI will be a continual source of education aimed at keeping entrepreneurs informed and prepared to meet the challenge of coming trends.

The **Marketing Institute** (formerly the Florida Institute for Marketing Alternative Transportation) was created to provide valuable market research and education/training programs to professionals in the transportation, sports, hospitalities, and professional service industries. Operated by a talented team of faculty, staff, and students, the Marketing Institute seeks to identify consumer attitudes and behavior that impact their purchase of products and services.

The **Center for Human Resource Management** in the College of Business at Florida State University provides a forum for human resource professionals to enter into high level discussions with academics and colleagues on critical issues. The HR Center also provides a vehicle for professional networking and provides a connection to, and support for, Florida State University, a major research oriented university. In addition to the main focus, the HR Center provides technical assistance, education and training programs, and published research to its executive and general membership.

The **BB&T Center for Free Enterprise** is a joint program of free enterprise between the College of Business and the College of Social Sciences and Public Policy, established by a generous gift from BB&T. Within the College of Business' Department of Finance, a professorship has been created to develop and promote a free-enterprise curriculum along with a new "Free Enterprise and Ethics" course, which will become part of a certificate program in Free Enterprise and Ethics.

The **Center for Real Estate Education and Research** serves to enhance the teaching, research, and service mission of the Real Estate Program at FSU. It organizes the annual Real Estate Trends & Networking Conference as well as other forums in which executives and scholars exchange ideas and share their insights with our students, alumni, and friends. The Center supports research for public and private interests, while maintaining a policy of political non-advocacy.

The **Florida Catastrophic Storm Risk Management Center** supports the state's ability to prepare for, respond to, and recover from catastrophic storms. The specific functions of the Center are to coordinate and disseminate research efforts that are expected to have an immediate impact on policy and practices related to catastrophic storm preparedness; coordinate and disseminate information related to catastrophic storm risk management, including but not limited to research and information that would benefit businesses, consumers, and public policy makers; facilitate Florida's preparedness and responsiveness to catastrophic storms and collaborate with other public and private institutions; create and promote studies that enhance the educational options available to risk management and insurance students; publish and disseminate findings; and organize and sponsor conferences, symposia, and workshops to educate consumers and policymakers.

The **Gene Taylor/Bank of America Center for Banking and Financial Studies** was created and named in honor of one of Bank of America's top executives. The Center functions to encourage excellence in research, education, and service activities related to banking and financial services and serves as liaison between the Finance Department, other departments in the College of Business, related programs and centers elsewhere on campus, centers at other universities, the banking and financial services professional community, governmental agencies, and the public at large. The Center operates as the administrative umbrella under which all banking and financial services related research, outreach, and service initiatives in the College of Business are conducted. The Center funds financial databases, research grants, faculty travel, guest speakers, and other research and classroom related items.

The **Center for Insurance Research** was established to support and enhance the research mission of the Florida State University Risk Management and Insurance Program in the College of Business. In response to the increasing importance of insurance and risk management in the U.S. and global markets, the Center is embarking on an ambitious redesign with a strong emphasis on research which will help shape business decisions and public policy in the insurance industry.

The **Sales Institute** is dedicated to preparing students by providing world-class sales education and training. Housed under the College of Business, we believe that Individual Attention and International Acclaim is the standard by which we operate and educate. By utilizing the most current sales training technologies developed through continuous research, we facilitate each student's evolution from student to successful sales professional. Equal to our education mission, is the mission to contribute to the economic development of the state of Florida by conducting research in the areas of sales and sales management and by sharing results of that research through publications, conference presentations, and both public and private sales and sales management seminars.

The **Carl DeSantis Center for Executive Management Education** focuses on enhancing the managerial skills and knowledge of managers who have a strong potential to advance to the executive level of their organizations.

The **Center for Veteran Outreach** serves veterans pursuing an education in business through recruitment, support, and advocacy. In an effort to recruit veterans to the College of Business, we actively reach out to those transitioning out of the military, as well as those that have already transitioned, to make them aware of the opportunities here at the FSU College of Business. Once enrolled at either the undergraduate or graduate level, in-residence or online, we provide support with résumé assistance, veteran scholarships, and by providing a private study/meeting area. Finally, we advocate for our veteran students by assisting with job placement, voicing their concerns in higher education, and by sponsoring veteran transition programs such as the Entrepreneurship Bootcamp for Veterans with Disabilities (EBV) program and research.

The **College of Business Ethics Roundtable** explores and clarifies the relationship of ethics to business decisions for students, faculty and staff, through programs and communications to improve the quality of business education and business decision making.

The **Center for Global Supply Chain Management** is a center of excellence in the supply chain management field and a preferred provider of talent, disseminator of best practice research, and developer of innovative curricula that meets the needs of world class organizations.

The **Institute for Applied Business Research** conducts a wide range of marketing research and offers developmental support services to professionals in public transportation, tourism and sports.

The **International Center for Hospitality Research and Development** serves as a key provider to international industry professionals of research on a wide array of topics, including tourism marketing, visitors, lodging and service management, food safety, operations policy analysis, and training.

Facilities

The **Charles A. Rovetta Business Building** is ideally located near the center of campus adjacent to Strozier Library and the Oglesby Union. It contains

modern classrooms, faculty and staff offices, and numerous support facilities. The **College of Business Technology Center** houses state-of-the-art computer laboratories and training rooms. It provides students access to the latest technology used in business. The **College of Business Undergraduate Programs Office** and **Graduate Programs Office** provide students with a wide variety of advising services.

Scholarships/Awards

Both master's and doctoral students are eligible to apply for numerous fellowships and assistantships provided at the University level. In addition, the College of Business provides substantial financial assistance to doctoral students. The College of Business assistantships/fellowships are awarded to doctoral students whose application materials reflect high academic and professional performance, potential, maturity, and a strong ability to teach and communicate with students.

Requirements

Admission Requirements

The Graduate Management Admissions Test (GMAT) (preferred) or the GRE are a requirement for admission to all graduate programs in the College of Business. Applicants that meet certain specified criteria may be eligible to request a waiver of the entrance exam. For students whose native language is not English, the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) is required. In addition, international students receiving funding as teaching assistants must successfully complete the Test of Spoken English (TSE). The TOEFL and the TSE are also offered in a combined exam known as the iBTOEFL (Internet-based TOEFL).

Admission to all graduate programs in business is based upon the following factors: upper division grade point average (GPA) in previous university-level courses; verbal, quantitative, and total scores on the GMAT (or GRE); TOEFL or IELTS score, if applicable; letters of recommendation that speak specifically to the ability of applicants to successfully complete the graduate program to which they are applying; relevant work experience; and a personal statement of goals. For those students applying to the Master of Accounting program, the undergraduate upper-division accounting GPA is also considered. For those students applying to the Master of Science in Finance program, the undergraduate upper-division finance and real estate GPA is also considered.

Master of Business Administration (MBA) Program: Thirty-nine semester hours are required for the full-time, part-time, and online programs. A one-hour Professional Development course is required each term for the full-time program. Applicants who do not have an undergraduate degree in business are expected to have a general knowledge of economics, finance, accounting, statistics, calculus, and management principles through prior work experience and/or coursework. For full-time students, the three-semester program begins in the Fall term only (late August) and the application deadline is March 1st to be considered for competitive assistantships that provide financial assistance, while June 1st is the application submission deadline for fall entry. The part-time and online programs begin in the Fall (late August), Spring (early January), and Summer (early May) terms. The application deadline is June 1st for Fall, October 1st for Spring and March 1st for Summer.

Master of Science in Risk Management-Insurance (MS in RMI) Program is an online, corporate program designed for the insurance professional and requires completion of thirty-three semester hours of graduate level coursework. The MS in RMI program begins only in the Summer term. It is offered on a distance-learning basis, via the Internet, to allow the working professional to obtain the degree. The application deadline is March 1st for the Summer term.

Master of Science in Management Information Systems (MS in MIS) Program: The management information systems major requires completion of thirty-three semester hours. This program is offered only in an online format. Applicants must have at least two years of IT-related work experience, as well as a basic understanding of programming languages, database concepts, and software analysis and design. Students can enter the MS in MIS program in the Fall (late August), Spring (early January), or Summer (early May) terms. The application deadline is June 1st for Fall, October 1st for Spring, and March 1st for Summer.

Master of Accounting (MAcc) Program: This is a thirty semester hour program that allows admission any term. Students can enter the MAcc program in the Fall (late August), Spring (early January), or Summer (early May) terms. The application deadline is June 1st for Fall, October 1st for Spring, and March 1st for Summer. The MAcc program is designed as a full-time, daytime program; however, students may attend on a part-time basis under certain circumstances. Applicants who do not have an undergraduate degree in accounting may enter a two-year program designed to ensure completion of appropriate prerequisites.

Combined Bachelor of Science in Accounting/Master of Accounting (BS/MAcc) Pathway: Florida State University Students majoring in accounting can opt for the combined bachelor's/master's pathway that allows them to streamline their studies. Admission is based upon an overall GPA, an upper-division GPA, and an upper-division accounting GPA based on at least four upper-division accounting courses. Eligible students apply for the combined pathway by the end of the second semester of their junior year. Admitted students are then able to register for up to nine semester hours of graduate courses that count towards both the BS and MAcc degrees during their senior year. Students admitted to the combined BS/MAcc pathway will still be required to apply separately to the Master of Accounting (MAcc) program.

Master of Science in Finance (MSF) Program: All students start in the Summer (Second six weeks, Summer "C" session; third week of June) semester and complete the program the following Spring semester. The program consists of thirty-two semester hours and includes a blend of theory, empirical analysis, and applications. The application deadline is March 1st for the summer term. The MSF program also offers a specialization in real estate finance and investment in which students focus on real estate finance courses instead of risk management and investment or international banking courses.

Combined Bachelor of Science in Real Estate/Master of Science in Finance (BS-RE/MSF) Pathway: Florida State University Students majoring in real estate with a strong combination of advanced analytical skills in finance and real estate can compete for positions emerging within leading companies. Admission is based upon an overall GPA, an upper-division GPA, and an upper-division finance and real estate GPA based on at least four upper-division finance and real estate courses. Eligible students apply for the combined pathway by the end of the second semester of their junior year. Admitted students are then able to register for up to nine semester hours of graduate courses that count towards the BS-RE and MSF degrees during their senior year. Students admitted to the combined BS-RE/MSF pathway will still be required to apply separately to the Master of Science in Finance (MSF) program.

Master of Science in Business Analytics (MS-BA) Program: This thirty-three semester hour, on-campus program admits in the summer term and is designed to be completed in three semesters while registering on a full-time basis. The application deadline is March 1st for the summer term. The program focuses on three key areas: data used for business analytics, methods and techniques used in business analytics, and managerial issues in business analytics.

Doctor of Philosophy (PhD) in Business Administration Program: Admission is only for the Fall term in order to be eligible for financial support and to provide an optimum program schedule (some programs admit every other Fall term). The application deadline for domestic and international students is March 1st. For priority review of applicants seeking financial support, application materials should be submitted by **January 15th**.

Individuals interested in the graduate programs offered by the College of Business should contact: *The Graduate Office, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110*, or via email at gradprograms@business.fsu.edu. Enrollment in graduate business courses is severely limited by both space and accreditation standards.

Readmission Requirements

Graduate students who have withdrawn, who have not been enrolled for two consecutive semesters, or who have been academically dismissed are required to meet the graduation and retention requirements of the *Graduate Bulletin* that is in effect at the time of their readmission. Students who left on dismissal must first resolve that with the academic dean before a readmission decision can be made.

Master of Business Administration (MBA) Program

The MBA program prepares promising students for successful careers in business and management. It provides high-quality business and management education with a professional, career-long perspective by developing the student's capacities and skills for decision making, leadership, and communications. The program also develops in students a spirit of enterprise, confidence, creativity, and attitude which is needed for advancement to positions of increasing responsibilities.

The MBA curriculum at Florida State University emphasizes the application of various business and management concepts to the decision-making process. The curriculum also exposes the student to the various functions of business and management, recognizing that the career of a successful manager will span multiple functions. This exposure not only provides students with an understanding of the interrelationships among various business and management operations and decisions, but it also provides a sound foundation for growth and development through subsequent experience and education after graduation.

All applicants to the MBA program, whether on a full-time or part-time basis, are expected to have a general knowledge of economics, finance, ac-

counting, statistics, calculus, and management principles through prior work experience, which includes internships, and/or coursework. It is recommended that applicants have some full-time work experience in a professional or supervisory position. Internship experience will be considered.

The part-time, evening and online MBA programs are structured for students who hold full-time positions and will require seven semesters to complete. The full-time program is completed within twelve calendar months (three semesters). Coursework usually is scheduled during the day.

The thirty-nine semester hour part-time program includes nine standard core courses taught by a variety of departments within the College of Business. The remaining four courses are electives.

Full-time MBA students are also required to complete a one-hour Professional Development course each term; the full-time MBA program is a thirty-nine hour program, which includes nine standard core courses, three electives, and the one-hour Professional Development course each term.

Electives may be chosen from other areas in the College of Business with approval of the Associate Dean for Academic Programs.

Master of Science in Risk Management-Insurance (MS in RMI) Program

The Master of Science in risk management program is an online, corporate program designed for the insurance professional. It requires completion of thirty-three semester hours of graduate level coursework and is offered on a distance-learning basis, entirely via the Internet, to allow the working professional to obtain the degree. The focus is on property and liability insurance. All eleven courses which comprise the program can be completed in twenty-four months and taken from anywhere in the world. Quality and convenience are paramount. The curriculum recognizes that industry professionals are not involved solely with insurance issues – they must face difficult financial, ethical, legal, and global concerns as well. The program structure, therefore, hones a student's ability to analyze these issues from different perspectives, fosters critical thinking, and engenders the discipline needed to become a successful manager.

Master of Science in Management Information Systems (MS in MIS) Program

The management information systems major requires completion of thirty-three semester hours. All MS in MIS applicants must have at least two years of IT-related work experience. The MS in MIS program is primarily designed for students who want to manage in technology oriented environments. All students complete a set of MIS core classes that cover topics such as project management, management of technology, knowledge management and business intelligence, electronic business, and social and organizational issues related to information systems. It is offered on a distance-learning basis, entirely via the Internet, to allow working professionals to obtain the degree.

Master of Accounting (MAcc) Program

The objective of the curriculum leading to the Master of Accounting degree is to provide students with greater breadth and depth in accounting education than can be accomplished in the baccalaureate program. Because of the increasingly complex nature of the accounting and controllership functions, as well as the growing responsibilities of the accountant, graduate study beyond the baccalaureate degree is desirable for a career in accounting.

The Master of Accounting degree consists of thirty semester hours (plus undergraduate foundation work if required). Students select a concentration in either Assurance and Advisory Services, Generalist, or Taxation.

The usual prerequisite for admission to the Master of Accounting curriculum is an undergraduate degree in business with a major in accounting. Applicants who present other undergraduate degrees will be required to complete foundation work in accounting and business administration prior to enrolling in graduate courses. The general graduate admissions policies of the College of Business also apply.

Combined Bachelor of Science in Accounting/Master of Accounting (BS/MAcc) Pathway

Highly qualified Florida State University accounting students can get a head start on graduate school by taking up to nine credit hours that will double count toward bachelor's and master's degree requirements. Students must meet an overall GPA, an upper-division GPA, and an upper-division accounting GPA on at least four upper-division accounting courses. Combined pathway students must maintain a "B" or higher in graduate coursework. Preferred application deadlines are May 1, August 1, or December 1 in the second semester of a student's junior year.

Master of Science (MSF) in Finance Program

Courses consist of a blend of theory, empirical analysis and applications. Throughout the program, there is heavy emphasis on the applied aspects of finance. Students are frequently involved in analysis and modeling efforts that resemble what they are likely to confront in their careers. Relevant theory and empirical analysis that underlie real-world decision making are also emphasized, as understanding such material is essential to truly grasp the decision-making process utilized in finance. The MSF program also offers a specialization in real estate finance and investment in which students focus on real estate finance courses instead of risk management and investment or international banking courses.

Prerequisites include Financial Accounting, a beginning course in Financial Management (FIN 3403 or its equivalent), Investments (FIN 4504 or its equivalent), and Problems in Financial Management (FIN 4424 or its equivalent).

Combined Bachelor of Science in Real Estate/ Master of Science in Finance (BS-RE/MSF) Pathway

Highly qualified Florida State University real estate students can take up to nine hours of coursework that will double count for undergraduate and graduate degree requirements. Students must meet an overall GPA, an upper-division GPA and an upper-division finance and real estate GPA on at least four upper-division finance and real estate courses. Combined pathway students must maintain a "B" or higher in graduate coursework. Apply for the BS-RE/MSF program before registering for senior-level real estate courses.

Master of Science in Business Analytics (MS-BA) Program

The purpose of the Business Analytics master's program is to develop student's in-depth skills in analyzing large datasets and making strategic business recommendations based on this analysis. Graduates of the program will be prepared for positions across a wide range of industries, such as the technology industry, online retail industry, transportation industry, the military, medical industry, insurance industry, etc. In addition to employment opportunities, graduates of this program will be prepared to enter business analytic-focused doctoral programs.

The MS-BA program requires completion of eleven courses (thirty-three semester hours) which consists of eight core courses (twenty-four semester hours) and three electives (nine semester hours). Previous coursework in business is not required, but all applicants are expected to have a general knowledge of economics, finance, accounting, statistics, calculus, and management principles. This full-time, on-campus program begins in the summer semester and can be completed by the following spring semester.

Juris Doctor (JD)/Master of Business Administration (MBA) Joint Graduate Pathway

The College of Law and the College of Business offer a joint graduate pathway leading to the Juris Doctor (JD) and the Master of Business Administration (MBA) degrees. Applicants to the program must fulfill the normal entrance requirements of both colleges. Admission into the joint graduate pathway must be made prior to the end of the first year of law school. After students have been admitted to the colleges of Law and Business, they must have their curriculum approved by the joint committee responsible for the administration of the program.

Further information may be obtained from: *The Graduate Office, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL 32306-1110*, or via email at gradprograms@business.fsu.edu. Students interested in the JD/MBA should also contact the Director of Admissions, *College of Law, Florida State University, Tallahassee, FL 32306-1610*; admissions@law.fsu.edu.

Master of Social Work (MSW)/Master of Business Administration (MBA) Joint Graduate Pathway

The College of Social Work and the College of Business offer a joint graduate pathway leading to the Master of Social Work (MSW) and the Master of Business Administration (MBA) degrees. Program applicants must fulfill the normal entrance requirements of both colleges. The joint graduate pathway is designed for students in both programs who wish to expand their understanding of the connection between these two fields of study and to gain expertise working in social-services agencies.

Further information may be obtained from: *The Graduate Office, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL 32306-1110*, or via email at gradprograms@business.fsu.edu. Students in-

terested in the MSW/MBA pathway should also contact the Director of Admissions, *College of Social Work, Florida State University, Tallahassee, FL 32306-2570*, maw@csu.fsu.edu.

Doctor of Philosophy (PhD) in Business Administration Program

The purpose of the doctoral program is to prepare candidates for careers in university research and teaching, as well as for administrative and research positions in business, government, and philanthropic organizations.

The doctoral curriculum emphasizes scientific study of decision making in an administrative context and the development of research abilities. The major thrusts of the business administration curriculum are professional discipline and theoretical research, which lead to further development of the discipline and to scholarly problem solving.

Program of Study

Candidates for the Doctor of Philosophy in business administration degree must satisfy the graduate faculty of the college that they have achieved:

1. a mastery of a primary area of concentration;
2. a high degree of proficiency in a support area;
3. a competency in the use of analytical and research tools.

Students will plan their program in consultation with a major professor and an advisory committee. The primary area of study must be selected from either accounting, finance, management information systems, organizational behavior and human resources, strategy, marketing, or risk management and insurance. A support area may be selected from a nonbusiness discipline or from another business discipline.

A minimum of one year of teaching and/or research is required of all candidates for the Doctor of Philosophy in business administration degree.

Preliminary Examinations

Comprehensive written examinations are given over the primary and support areas upon completion of all coursework. An oral examination may be given over the student's primary and support areas once written examinations have been completed. The entire examination process will normally take place within the scope of a single semester. While the analytical and research tools area does not include a comprehensive examination, students must earn a grade of "B" or better in each of the courses in the area. All incomplete grades must be removed prior to taking the doctoral primary and support exams and enrolling for dissertation hours.

Dissertation

Each doctoral candidate will undertake research on a subject approved by the dissertation committee. The student must demonstrate critical judgment in performing the investigation, and the finished dissertation must be a scholarly study that advances knowledge in the discipline. After completion of the dissertation, a final oral examination covering the candidate's research is required. Students must register for dissertation credit each term during which they are in the dissertation phase of their program. A minimum of twenty-four semester hours of dissertation credit must be earned. Students are not permitted to enroll for and receive dissertation credit until they have passed all of their doctoral preliminary examinations.

COLLEGE OF COMMUNICATION AND INFORMATION

GRADUATE

Dean: Lawrence C. Dennis; **Associate Deans:** Michelle M. Kazmer, Marcia Mardis, Paul F. Marty, Stephen D. McDowell, Ebrahim Randeree

Communication, information, and information technology are ubiquitous in our interconnected society and influence all forms of human activity. Understanding the complex and ever-changing world of people, communication, information, and technology and assuring access for all underlie the teaching, research, and service missions of the College of Communication and Information (CCI) at Florida State University.

The College offers a unique and integrated series of communication degrees and communication science and disorders programs at the graduate master's and doctoral levels. The curriculum covers the whole of human communication (both normal and disordered), including speech and interpersonal communication, group and organizational communication, as well as mass-mediated and interactive computer-based communication. The multi- and inter-disciplinary domains represented by the School of Information offer some of the most diverse and rewarding professional opportunities available today with degrees in information and information technology. Powerful information technologies have fundamentally changed the nature of how information is produced, distributed, acquired, organized, stored, preserved, and analyzed. We live in an increasingly interconnected information world, with technologies such as the Internet, personal computers, and wireless devices significantly changing the way we connect people and information.

The College's programs of study may include both academically and professionally-oriented courses. Each program integrates knowledge about people, communication, information, and technology from a variety of scientific, humanistic, technical, and artistic perspectives, as well as from business, education, government, and other professional orientations.

Graduate Degree Programs

Students applying for admission to one of the College's graduate programs must also apply through the Office of Admissions. For more information, please visit <http://admissions.fsu.edu/>.

School of Communication

Understanding the complex and ever-changing nature of communication's vital role in a democratic society, the School of Communication at Florida State University recognizes the need to examine the field from a multitude of theoretical, practical, and creative approaches. We prepare students to be versatile communication practitioners and engaged global citizens through innovative and experiential learning experiences, research and creative scholarship, and service to the discipline, university, and community.

The graduate programs in communication offer several specialized majors leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. For more information, please visit <http://comm.cci.fsu.edu/> and/or consult the "School of Communication" listing in this *Graduate Bulletin*.

School of Communication Science and Disorders

The mission of the Florida State University School of Communication Science and Disorders is to generate and disseminate knowledge related to communication processes and disorders. The school prepares undergraduate and graduate students to demonstrate broad-based knowledge of communication sciences and to apply theory and research findings to clinical practice. The graduate program prepares speech-language pathologists to provide effective diagnostic and treatment services to individuals with a wide variety of speech, language, and hearing impairments. It prepares clinical scientists to generate new knowledge pertaining to communication processes and innovative strategies for evaluating and managing communication disorders.

The School of Communication Science and Disorders offers programs of study leading to the Master of Science and Doctor of Philosophy degrees. For more information, please visit <http://commdisorders.cci.fsu.edu/> and/or consult the "School of Communication Science and Disorders" listing in this *Graduate Bulletin*.

School of Information

The School of Information (iSchool) is one of the top-ranked Information programs in the nation and offers a myriad of opportunities to facilitate people's need for credible information with complex and highly sophisticated technology. Information professions serve as a bridge between people, information, and technology, ensuring that information systems are designed to support and empower users, and that the information technology used is

affordable, flexible, reliable, and robust. Information professionals ensure that people can access the credible information they want and need, while addressing issues such as security and privacy, intellectual property, and information policy.

Established in 1947 as a professional school, the iSchool offers graduate degree programs that provide professional development in information management, information technologies, and information services. The Master of Arts in Information (MA) and Master of Science in Information (MS) degree programs are accredited by the *American Library Association* (ALA). The iSchool also offers a Master of Science in Information Technology (MS), a Specialist degree, and a Doctor of Philosophy (PhD) degree, as well as certificate programs in Health Information Technology, Information Architecture, Information Leadership and Management, Reference Services, School Librarian Leadership, and Youth Services. The iSchool is a member of the *Association for Information Science and Technology* (ASIS&T): <https://www.asist.org/>, the *Association for Library and Information Science Education* (ALISE): <http://www.alise.org/>, and is a founding member of the *iSchools* movement: <http://ischools.org/>.

For more information, please visit <http://ischool.cci.fsu.edu/academics/graduate/> or consult the "School of Information" listing in this *Graduate Bulletin*.

Combined Bachelor's/Master's Pathways

The College of Communication and Information has developed a combined bachelor's/master's pathway (BS/MS, BA/MA) combining a bachelor's degree in Communication and Digital Media or Professional Communication and a master's degree in the Integrated Marketing Communication; Media and Communication Studies; or Public Interest Media and Communication programs. This pathway provides eligible undergraduate students the opportunity to take up to twelve semester hours of graduate coursework. These twelve semester hours may count toward both the bachelor's and master's degrees. Check the website for more details: <http://cci.fsu.edu/>.

The College of Communication and Information has also developed a combined bachelor's/master's pathway (BS/MS) combining a bachelor's degree in Information Technology with a master's degree in Information Technology. This pathway offers eligible undergraduate students the opportunity to take up to twelve semester hours of graduate coursework, which may be counted toward both the BS and MS degrees. Check the website for more details: <http://cci.fsu.edu/>.

Facilities

The College of Communication and Information offers graduate students opportunities to enrich their learning experiences through participation in a variety of research centers, service, classroom facilities, and student professional organizations. These include the following centers and institutes:

- Center for Adult Language Laboratory
- Center for Augmentative and Alternative Communication Laboratory
- Center for Hispanic Marketing Communication
- Center for Information Analysis and Organization
- Cognition and Emotion Laboratory
- Communication and Early Childhood Research and Practice Center
- Communication Research Center
- Information Use, Management and Policy Institute (Information Institute)
- Institute for Digital Information and Scientific Communication (iDigInfo)
- Institute for Intercultural Communication and Research
- L. L. Schendel Speech and Hearing Clinic
- Neurolinguistic-Neurocognitive Research Center
- North Florida Center for Stuttering
- Participatory, Experientially-based Applied Knowledge for Social Change (PEAKS) Laboratory
- Project Management Center
- Research and Language and Literacy Lab
- Seminole Productions
- Speech and Voice Science Laboratory

In addition, the College provides students with access to state-of-the-art facilities and support through a wide range of computer, research and media production labs and technical support services, including the following:

- Computer classrooms in University Center for advanced media production and statistical analysis
- IT Help Desk to provide access to technology support, advanced software systems, and high-end computer systems
- New Technology center in the William Johnston Building for instruction in networking, databases, media production, health information technology, mobile and enterprise information systems
- WVFS, the university's "college radio station"

Graduate students within the college are very active in professional development organizations including the following:

- American Library Association Student Chapter
- Association of Information Technology Professionals
- Beta Phi Mu Honor Society
- Communication Graduate Student Association
- International Communication Association
- National Communication Association
- National Student Speech Language Hearing Association

Scholarships, Awards, and Financial Aid

The Schools of the College of Communication and Information (CCI) are committed to assisting qualified individuals and offer various forms of financial aid to both master's and doctoral students.

Graduate Assistantships

The College administers graduate research, service, and teaching assistantships that require work within a particular School assisting faculty in teaching and research, staffing the library and laboratories, or assisting with training about and servicing of the information technology infrastructure. Assistantships vary in stipend amount, are competitive, and typically provide assistance with matriculation fees. To be considered for such awards, students should complete the School's application for graduate assistantships available on each School's website, which can be accessed via <http://cci.fsu.edu/>. For the School of Communication, no assistantship application form exists. All admitted graduate students are automatically considered for funding.

Scholarships and Fellowships

The College administers scholarships resulting from the generosity of alumni and other friends of the institution. To be considered for a scholarship, students must submit the specific School's application for scholarships. The application for and information about specific scholarships and fellowships is provided on each School's website, which can be accessed via <http://cci.fsu.edu/>. In addition to these sources, prospective students should consult the various communication and information professional associations' websites.

COLLEGE OF CRIMINOLOGY AND CRIMINAL JUSTICE

GRADUATE

Dean: Thomas G. Blomberg; **Director of Undergraduate Studies, Criminology and Criminal Justice:** Patricia Warren; **Director of Graduate Studies, Criminology and Criminal Justice:** Carter Hay

The Florida State University College of Criminology and Criminal Justice is the oldest doctoral program in the field and is one of the world's foremost centers of scholarship and teaching related to problems of crime and the administration of justice.

The College is home to some of the nation's premiere scholars in criminology and criminal justice. Some of the areas of research for which faculty are well known include biosocial criminology, corrections, courts, juvenile justice, victimology, gun control, self-control and crime, urbanization and crime, and fear of crime. FSU has historically led the nation in funding for research on education and delinquency. The faculty are among the best in the nation in terms of scholarly productivity, and PhD graduates from FSU have a very high level of publication in scholarly journals.

The **Center for Criminology and Public Policy Research** boasts \$13 million in externally funded research projects, and conducts ground-breaking research that promotes evidence-based policy-making and practice at state and national levels. It also provides unique hands-on research opportunities for graduate students.

College faculty serve as Editor or Co-Editor for the journals *Criminology* and *Public Policy*, the two official journals of the American Society of Criminology. Additionally, the College owns and produces the *Journal of Drug Issues*, a premier international journal for the study of illegal drugs and drug policy.

The graduate programs emphasize the importance of scientifically rigorous research that advances the knowledge of the discipline and informs public policy. The master's program prepares students for an administrative or research career in the criminal justice system and other related areas. The doctoral program trains individuals as critical scholars and prepares them for a career of teaching and research or for a higher-level research or administrative career in the criminal justice system.

The College of Criminology and Criminal Justice offers graduate degree programs leading to the Master of Science (MS), Master of Arts (MA), and the Doctor of Philosophy (PhD) degrees. In addition to the criminology degree programs, joint graduate pathways are offered in public administration and social work. For the most current information, go to the College's Web site at <http://www.criminology.fsu.edu/>.

Scholarships, Awards, and Financial Aid

Each year the College of Criminology and Criminal Justice offers a number of assistantships to incoming and continuing graduate students with excellent academic records. Assistantships require thirteen to twenty hours of work per week. Work commitments vary by salary and job assignments and include teaching and research appointments in the College and research appointments at the Center for Criminology and Public Policy Research. Tuition waivers are included as part of these awards. Only full-time students are eligible for these awards.

In addition to these awards, the College offers the Robert L. Clark Scholarship, Jerry A. and Caroline S. Glass Scholarship Award, Eugene and Rosalind Czajkowski Scholarship, Joe Harris Memorial Teaching Fellowship, Ernest Kearns Ponce De Leon Memorial Scholarship, Richard Rachin Fellowship, and the Gordon P. Waldo Fellowship. These awards are made on an annual basis but may be continued for a second year and carry no work assignment. Students interested in these awards should apply through the Office of the Dean, College of Criminology and Criminal Justice.

There are other University-wide fellowships that students may apply for through The Graduate School.

Admission Requirements

All regular requirements of the University must be met. The College of Criminology and Criminal Justice will exercise discretion in admitting students from among those who meet the minimum criteria specified below.

Applications for Fall and Spring semesters are accepted, though admission in Fall is recommended. To receive full consideration for admission and funding, application materials must be received by January 15th. Applications for Fall are accepted until July 1st and for Spring until November 1st. No applications are accepted for Summer admission to our campus program.

Master's Program

Applicants must submit evidence of a completed baccalaureate degree, a verbal and quantitative Graduate Record Examination (GRE) score, transcripts of all undergraduate and graduate study, three letters of reference from persons familiar with their academic performance and potential, and a personal statement between 300 and 500 words in length. A minimum undergraduate upper-division grade point average (GPA) of 3.25 (on a 4.0 scale) is required for admission. Most students accepted into our program have GRE scores between 148 and 160 on both the verbal and quantitative tests.

Doctoral Program

Doctoral students may be admitted either upon completion of their baccalaureate degree, or upon completion of a master's degree (MA or MS). Those entering the program with only a bachelor's degree must have a cumulative GPA of at least 3.5, and must maintain a GPA of 3.5 or higher throughout the master's coursework. Those entering with a master's degree must submit evidence of a completed degree program, a copy of their thesis or equivalent research paper, and must have a 3.5 cumulative GPA for their master's coursework.

Degree Requirements

All Graduate Students

All regular requirements of the University must be met.

Students pursuing the doctorate degree must achieve a grade of "B" (3.0) or better in each of the following required courses: CCJ 5109, CCJ 5285, CCJ 5606, CCJ 5705, and CCJ 5706. Approved equivalent courses from other programs may be substituted for the above. Master's degree students must achieve a grade of "C" (2.0) or better in all required courses. All students must maintain a 3.0 GPA.

In addition to those courses required for the master's degree, all doctoral students must complete CCJ 5740, CCJ 6065, and any two of the following three research methods courses with a minimum grade of "B" (3.0) or better: CCJ 5707, CCJ 5709, and CCJ 6741r.

Master of Science (MS)

Students pursuing the Master of Science degree must satisfy the requirements listed above for all graduate students and may take one of the three following program options:

1. Successful completion of thirty-three semester hours of coursework; this option does not qualify a student for application to the doctoral program;
2. Successful completion of twenty-four semester hours of coursework **and** a minimum of six hours of credit for an original thesis; this option includes an oral thesis defense; or
3. Successful completion of twenty-seven semester hours of coursework **and** six semester hours on a master's area paper; this option may include an oral defense of the area paper at the discretion of the student's supervisory committee.

In each of these options, there must be a minimum of twenty-four semester hours earned within the College of Criminology and Criminal Justice. This includes coursework, thesis, or area paper. Twenty-one of the hours must be graded hours.

The College of Criminology and Criminal Justice features Web-based courses that permit graduate students to earn a master's degree without coming to campus. Additional information about this opportunity is available at: <http://www.criminology.fsu.edu/>.

Master of Arts (MA)

Students studying for the Master of Arts degree may follow any of the three Master of Science options. Please note, though, that the MA comprises the additional requirements that coursework must include at least six graduate semester hours of humanities credit, and that the student must demonstrate proficiency in a foreign language as determined by University criteria.

Doctor of Philosophy (PhD)

Students pursuing the PhD must satisfy the requirements listed above for all graduate students. The sufficiency of additional coursework is determined

by the student's supervisory committee. PhD students must also fulfill the Scholarly Engagement requirement. Doctoral students should interact with faculty and peers in ways that may include enrolling in courses; attending seminars, symposia, and conferences; engaging in collaborative study and research beyond the university campus; and utilizing the library, laboratories, and other facilities provided by the University. Qualification for PhD candidacy is established upon the passing of written comprehensive examinations in two areas: 1) theory and 2) research methods and statistics. The theory and methods exams are graded by college-wide committees.

A dissertation prospectus must be approved by the student's supervisory committee after the passing of comprehensive examinations. A minimum of twenty-four semester hours of dissertation credits will be earned by all doctoral students. Completion and successful oral defense of the dissertation will lead to the awarding of the PhD.

DEDMAN SCHOOL OF HOSPITALITY GRADUATE

Director: Donald G. Farr

Note: The online program for Business Administration, MBA with a major in Hospitality and Tourism Management, has been suspended effective Fall 2016 and will not be accepting any new students until further notice.

COLLEGE OF EDUCATION

GRADUATE

Dean: Damon Andrew; **Associate Dean for Academic Affairs:** Amy R. Guerette; **Associate Dean for Faculty Development:** Robert Eklund; **Associate Dean for Research:** Robert Reiser

The primary mission of the College of Education is to prepare administrators, teachers, educational researchers, educational policymakers, human services specialists, and other professional personnel for a wide range of educational careers in both public and private settings. In support of this purpose, the faculty of the college is committed to conducting research that contributes to the science of education; to the ongoing assessment and improvement of educational practice; and to the development of theory, policy, and execution of educational practice, both domestic and foreign. In order to accomplish this purpose the college offers master's, educational specialist, and doctoral degrees.

Florida State University's College of Education's conceptual framework is based on a model that engages faculty, professional partners, and candidates in a continuing process of preparing educational leaders for a global and diverse society. The University prepares educational leaders to uphold high professional and academic standards and employs scientific inquiry and assessment as a basis for the continual improvement of student learning. These qualities are developed as candidates study and work within a community of professional partners. The needs and abilities of diverse students are addressed through the use of appropriate instructional strategies and technologies.

The College of Education maintains a wide variety of graduate degree programs in each of its four constituent departments.

Departments and Graduate Programs of the College of Education

The College of Education offers graduate degree programs in numerous fields of study. Each field of study allows the student to develop an individualized program of study around a core curriculum in a chosen degree program.

Most master's level and specialist degree programs require students to take a required core of courses, complete coursework in an area of specialization, and complete a comprehensive examination and/or thesis. Most full-time students require one or two years to complete a master's degree program. The doctoral degree programs are designed to provide educational experiences that enable students to acquire a thorough understanding of theoretical and methodological foundations of the discipline and related areas of specialization. Upon the completion of core requirements, students take preliminary examinations to certify their mastery of the knowledge base undergirding the practice of the discipline. Students seeking the doctoral degree must demonstrate their capacity to do original, independent, and integrative scholarly research by completing a dissertation.

Department of Educational Leadership and Policy Studies

- Educational Leadership and Policy
 - Educational Leadership/Administration
 - Education Policy and Evaluation
- Foundations of Education
 - History and Philosophy of Education
 - International and Multicultural Education
- Higher Education
 - Certificate in Educational Leadership - Modified Program
 - Certificate in Institutional Research
 - Certificate in Program Evaluation

Department of Educational Psychology and Learning Systems

- Counseling and Human Systems
 - Career Counseling
 - Mental Health Counseling
 - School Counseling
 - School Psychology
- Counseling Psychology and Human Systems
 - Combined Program in Counseling Psychology and School Psychology
- Educational Psychology

- Learning and Cognition
- Sport Psychology
- Instructional Systems and Learning Technologies
 - Instructional Systems and Learning Technologies
 - Learning Design and Performance Technology
- Measurement and Statistics
 - Certificate in Human Performance Technology
 - Certificate in Measurement and Statistics
 - Certificate in Online Instructional Development
 - Certificate in Online Teaching and Learning

School of Teacher Education

- Curriculum and Instruction
 - Autism Spectrum Disorder
 - Elementary Education
 - Elementary Education, Combined BS/MS Pathway
 - English Education
 - English Teaching, Combined BS/MS Pathway
 - Foreign and Second Language Education
 - Mathematics Education
 - Reading Education/Language Arts
 - Science Education
 - Social Science Education
 - Social Science Teaching, Combined BS/MS Pathway
 - Special Education
 - Special Education Teaching, Combined BS/MS Pathway
 - Visual Disabilities
 - Visual Disabilities, Combined BS/MS Pathway
 - Visual Disabilities Studies
 - Certificate in Autism Spectrum Disorder
 - Certificate in Teaching English as a Second Language (TESOL)

Department of Sport Management

Sport Management

The College of Education also offers a graduate certificate in Athletic Coaching housed within the Interdisciplinary Center for Athletic Coaching.

Facilities and Opportunities

The College of Education houses six departmental research and service centers that provide facilities and support for research undertaken by faculty members and students. Departmental research and service centers include: the Center for Educational Research in Mathematics, Engineering and Science (CERMES); the Center for the Study of Technology in Counseling and Career Development; the Hardee Center for Leadership and Values; the Center for Postsecondary Success (CPS); the Center for Sport, Health and Equitable Development; and the Interdisciplinary Center for Athletic Coaching (FSU COACH). A University-wide center, the Learning Systems Institute, represents an interdisciplinary group of researchers in educational and experimental psychology, communications, policy studies, and management and is the nation's leading producer of instructional systems design technology for use in a variety of educational settings throughout the world. All of these research arms frequently hire graduate students from the College of Education to assist with state, federal, and international grants and to provide invaluable resources and opportunities for applied educational research.

Admission Standards

Students considered for admission to the college must present a 3.0 upper-division grade point average (GPA) as an undergraduate and a minimum GRE score determined by the department. Applicants to the college must submit an official GRE score to the University as part of the admission pro-

cess. Individual departments may have additional requirements for admission. Students should consult the appropriate department chapter of this *Graduate Bulletin* or website for details.

Graduate Programs and Degree Requirements

The College of Education offers the Master of Arts, Master of Science, Specialist in Education, Doctor of Education, and Doctor of Philosophy degrees.

Graduate program curricula in the College of Education are governed by University-wide graduate studies regulations. These serve as minimum requirements, but College of Education and/or department requirements may exceed them. The major professor and/or supervisory committee is responsible for evaluating the recency and validity of all prior coursework. Graduate students in Education should become familiar with University, college, and department requirements soon after admission.

The progress of students through degree programs is the personal responsibility of the individual student with appropriate guidance from the major professor and supervisory committee. The Office of Academic Services and Intern Support (OASIS), 2301 Stone Building, monitors students' degree progress and checks each student's record for graduation clearance. **It is the responsibility of the student to become fully aware of the regulations set forth in this *Graduate Bulletin* in addition to the policies and procedures of the College of Education as administered by the Office of Academic Services and Intern Support (OASIS).**

Master's Degree Program

1. Admission in a degree program as a regular degree-seeking graduate student is required.
2. The major professor should be selected and approved during the first semester of enrollment. The thesis-track master's degree supervisory committee must consist of a minimum of three members. All members must hold Graduate Faculty Status. Two members, including the major professor, must be from the major in which the student will receive a degree. Course-type master's degree students must be assigned a major professor who holds Graduate Faculty Status.
3. The program of study should be submitted to the Office of Academic Services and Intern Support (OASIS) by the end of the second semester after admission. The program of study must include all courses required for the degree, i.e., master's comprehensive exams and/or thesis defense and thesis hours, if applicable.
 - a. A minimum of thirty semester hours of graduate credit must be successfully completed with a 3.0 graduate GPA in course-type master's programs. Twenty-one semester hours of graduate credit in the course-type program must be taken on a letter-grade basis (A, B, C). The academic department may require students in course-type programs to complete more than thirty graduate semester hours.
 - b. A minimum of thirty semester hours of graduate credit must be successfully completed with a 3.0 graduate GPA in thesis-type programs. Eighteen semester hours of graduate credit in the thesis-type program must be taken on a letter-grade basis (A, B, C).
 - c. Coursework taken more than seven years prior to graduation may not be used toward the degree requirements.
 - d. Only six hours of graduate transfer credit is applicable toward the degree. No student may be awarded more than twelve hours of combined non-degree seeking student and/or prior-institution graduate transfer credit. This rule means that a student wishing to post six hours of graduate transfer credit, which has not been posted under a previous degree at that institution, can be awarded no more than six hours of non-degree seeking student transfer credit, to reach the aggregate maximum of twelve credit hours.
 - e. Students in thesis-type master's programs must successfully complete a minimum of six thesis hours and be registered for a minimum of two hours of thesis credit in the semester that their degree will be awarded. A Prospectus Clearance Form signed by the thesis supervisory committee, department chair, and academic dean and an Institutional Review Board (IRB) Human Subjects Committee Approval Verification Form must be submitted to OASIS for all thesis-track MS students. Thesis-type degree students must meet all manuscript clearance requirements and submission deadlines set by The Graduate School in the semester of graduation.
4. Successful completion of a written comprehensive examination for course-type programs, an oral defense for thesis-type programs, or a capstone portfolio defense or capstone course for course-type MS programs is a graduation requirement for Education majors. Note that

specific exit requirements for any individual program are set by the student's department; it is the student's responsibility to familiarize himself/herself with the capstone requirements of that major. Clearance to schedule these examinations must be obtained from the student's major professor and committee, who in turn notify the Office of Academic Services and Intern Support (2301 Stone Building) of the examination results, in writing, no later than the last week of the semester. Students must have a 3.0 GPA in all graduate coursework to be eligible to apply to graduate through the University Registrar and the department. Students must also have an approved accurate program of study and a supervisory committee/advisor form on file in the Office of Academic Services and Intern Support before graduation clearance will be given. Students lacking these materials will not be cleared for final term degree posting.

Specialist Degree Program

1. The specialist in education degree is essentially an advanced master's degree. It is reserved for students with a prior graduate degree in a specific field of education. Requirements vary widely by department or program specialization.
2. Admission in a degree program as a regular degree-seeking graduate student is required.
3. The major professor should be selected and approved during the first semester of enrollment. The thesis-track dual-enrollment MS/EdS degree and thesis-track Specialist's degree supervisory committee must consist of a minimum of three members. All members must hold Graduate Faculty status. Two members, including the major professor, must be from the major in which the student will receive a degree. Course-type combined MS/EdS degree and Specialist's degree program students must be assigned a major professor who holds Graduate Faculty Status.
4. The program of study should be submitted to the Office of Academic Services and Intern Support (OASIS) by the end of the second semester after admission. The program of study must include all courses required for the degree, i.e., specialist comprehensive exam, capstone course or a capstone portfolio defense, or, if applicable, specialist's thesis hours and specialist thesis defense.
 - a. A minimum of thirty semester hours of graduate credit must be successfully completed with a 3.0 graduate GPA in a course-type specialist's program. Twenty-one semester hours of graduate credit in the course-type program must be taken on a letter-grade basis (A, B, C). The academic department may require students in course-type programs to complete more than thirty graduate semester hours.
 - b. A minimum of thirty semester hours of graduate credit must be completed with a 3.0 GPA in a thesis-type specialist's program. Eighteen semester hours of graduate credit in the thesis-type program must be taken on a letter-grade basis (A, B, C). The academic department may require students to complete more than thirty graduate semester hours. Thesis-type degree students must meet all manuscript clearance requirements and submission deadlines set by The Graduate School in the semester of graduation.
 - c. Requirements related to extension of transfer credit, residency, recency of work, supervised research and supervised teaching, thesis requirements, and satisfactory/unsatisfactory (S/U) course option are applied to the Specialist in Education degree in the same manner as they are to the master's degree.
 - d. Students in thesis-type MS/EdS dual-enrollment degree and Specialist's degree programs must successfully complete a minimum of six thesis hours and be registered for a minimum of two hours of thesis credit in the semester that their degree will be awarded.
5. Successful completion of a written comprehensive examination for course-type programs, an oral defense for MS/EdS and Specialist's thesis-type programs, or a capstone course or capstone portfolio defense for some course-type programs is a graduation requirement for Education majors. Note that specific exit requirements for any individual program are set by the student's department; it is the student's responsibility to familiarize himself/herself with the capstone requirements of that major. Clearance to schedule these examinations must be obtained from the student's major professor and committee, who in turn notify the Office of Academic Services and Intern Support (2301 Stone Building) of the examination results, in writing, no later than the last week of the semester. Students must have a 3.0 GPA in all graduate coursework to be eligible to apply to graduate through the University Registrar and the department. Students also must have an approved accurate program of study and a supervisory committee/

advisor form on file in the Office of Academic Services and Intern Support before graduation clearance will be given. Students lacking these materials will not be cleared for final term degree posting.

Doctoral Degree Programs

1. Admission in a degree program as a regular degree-seeking graduate student is required.
2. The major professor should be selected and approved during the first semester of enrollment. The supervisory committee must consist of a minimum of four members. All four members must hold Graduate Faculty Status. Two members, including the major professor, must be from the program major in which the student will receive a degree. The University representative must be from outside the student's department and must be a tenured member of the faculty.
3. Students admitted to a doctoral program (Doctor of Education or Doctor of Philosophy degree) must, before the end of the second semester, take a departmentally administered diagnostic/qualifying examination. The diagnostic/qualifying exam is designed to assess the student's suitability for pursuit of the Doctor of Education or Doctor of Philosophy degree and to facilitate counseling in the development of the student's program of study.
4. The program of study must be submitted to the Office of Academic Services and Intern Support (OASIS) by the end of the first academic year after admission. The program of study must include all courses required for the degree, i.e., doctoral preliminary exams, dissertation hours, and dissertation defense. The program must include courses designed to meet the research tool requirements, which include basic inferential statistics and research design skills for pursuing independent inquiry.
5. Students seeking the Doctor of Education or Doctor of Philosophy degree must disclose fulfillment of the University scholarly engagement policy. Students should refer to the academic program-specific doctoral handbook for departmental scholarly engagement requirements.
6. A written preliminary examination with oral defense of results is required. Clearance to schedule these examinations must be obtained from the student's major professor and committee, who in turn notify the Office of Academic Services and Intern Support (2301 Stone Building) of the examination results, in writing, no later than the last week of the semester. Students must have a 3.0 GPA in all graduate coursework to be eligible to register for the preliminary exam through the University Registrar and the department.
7. In order to be considered 'complete' for final degree clearance, a doctoral student must have the following documents on file with the Office of Academic Services and Intern Support and meet the following requirements:
 - a. An accurate program of study form, complete with signatures of all committee members and the department chair.
 - b. Departmental qualifying/diagnostic examination results.
 - c. A supervisory committee form on file in the Office of Academic Services and Intern Support before graduation clearance will be given.
 - d. Doctoral preliminary examination results and a copy of the Admission to Candidacy Form. Note that successful completion of the doctoral preliminary exam is a requirement for admission to doctoral candidacy. The results of the preliminary examination and an approved admission to candidacy form must be submitted to the Office of Academic Services and Intern Support upon successful completion of the preliminary exam, no later than the final week of the semester. Students wishing to have DIS credits converted to dissertation hours retroactively upon passing the preliminary exam must have taken and passed the test prior to the end of the seventh week of the semester (prorated in the Summer term) or DIS credits cannot be converted. Under no circumstance will a retroactive conversion of more than nine credits be approved. Dissertation credits may not be taken until the student is formally admitted to candidacy.
 - e. A Prospectus Clearance Form signed by the supervisory committee, department chair, and academic dean;
 - f. A University representative prospectus evaluation;
 - g. A prospectus of the dissertation must be submitted to the department chair for approval after passing the preliminary examination. The Prospectus Clearance Form must be approved by the Academic Dean at least four months prior to the defense of the dissertation;
 - h. An Institutional Review Board (IRB) Human Subjects Committee Approval Verification Form;
 - i. The Manuscript Signature Form approved by the major professor and all committee members, using the online Manuscript Clearance Portal. All committee members and the student must attend the entire defense in real time, either by being present or participating via distance technology. If exceptional emergency circumstances, e.g. medical or other emergency situations, prevent the participation of a committee member, then it may be necessary to arrange for an additional appropriately qualified colleague to attend the defense. A minimum of four members with Graduate Faculty Status must participate. To receive a passing grade, the written dissertation must be in final form or require only minor revisions at the time of the defense. A grade of PASS for the defense of dissertation requires at least a majority approval of the committee. Individual departments may impose stricter requirements for what constitutes a grade of PASS.
 - j. The Final Degree Clearance Form approved by The Graduate School Manuscript Clearance Advisor, using the online Manuscript Clearance Portal. Students must meet all manuscript clearance requirements and submission deadlines set by The Graduate School in the semester of graduation.
8. Successful completion of a minimum of twenty-four hours of dissertation credit must be included in the degree program.
9. A student who has completed the required coursework, passed the Preliminary Examination and submitted an Admission to Candidacy form to the Office of the Registrar, and continues to use campus facilities and/or receives faculty supervision, but has not been cleared by the Manuscript Clearance office shall include in the required full-time load a minimum of two credit hours of dissertation per semester, including Summer term, until completion of the degree.
10. Doctoral students, after completion of the preliminary exam and twenty-four credit hours of dissertation, must be enrolled for a minimum of three credit hours per semester (of which at least two must be dissertation hours) until completion of the degree. For more information on the full-time load for doctoral students, see the "Student Course Load" section of this Graduate Bulletin. International students may have different requirements.
11. Students must register for a minimum of two semester hours of dissertation credit in the semester their degree will be awarded.
12. Students must register for dissertation defense in the term in which the requirement is completed.
13. A student must be admitted to candidacy at least six months prior to the granting of the degree. The purpose of this requirement is to ensure a minimal lapse of time for effective work on the dissertation after acquisition of the basic competence and after delineation of the problem and method of attack.
14. Students lacking these materials and requirements will not be cleared for final term degree posting.

Office of Academic Services and Intern Support (OASIS)

Co-Directors: George Green, Undergraduate Services; Lisa Beverly, Graduate Services; **Director of Student Teaching:** Meredith Higgins

The Office of Academic Services and Intern Support (OASIS) provides a wide array of professional and administrative services to students and faculty in the college and throughout the University. Under the direction of the Associate Dean, OASIS is responsible for:

- providing centralized academic advisement for Basic Division students interested in majoring in education,
- collecting and processing applications for admission and readmission to the College of Education,
- maintaining the Dean's academic records for all students formally admitted to COE programs,
- monitoring students' progress toward the degree,
- collecting and processing applications for admission to educator preparation,
- conducting graduation checks and clearing students for teacher certification and
- providing other consultative and administrative services for the students and faculty in the College.

The Office of Academic Services and Intern Support (OASIS) is responsible for the assignment of students to student teaching experiences. The office works with Educator Preparation programs in the University and the public schools of Florida in the organization of student teaching centers and the selection of professional educators for intern supervision. Faculty members work with these supervising teachers and student teachers in planning and carrying out the final-term internship. The Office of Academic Services and Intern Support, 2301 Stone Building, is responsible for the final identification and screening of all students who make application for student teaching.

Students are assigned for the student teaching experience **as space, contract obligations, and the availability of a suitable supervising teacher dictate. Academic programs may, at their discretion, establish a minimum group size of two or greater and restrict placement to particular counties among those identified.** Student teaching assignments are subject to availability and district and school or agency acceptance of the student teacher. Therefore, student teacher assignments are not guaranteed. Also, note that final term placement is conditional on successful completion of all relevant program requirements, including passage of all required sections of the Florida Teacher Certification Exam (FTCE), and acceptance by an approved school district or agency. Candidates should plan to sit for the Subject Area and Professional Educator portions of the FTCE no later than thirty days prior to making application for student teaching to allow time for receipt of official score reports from the test administrator.

Applications for Student Teaching must be submitted to the Office of Academic Services and Intern Support (2301 Stone Bldg.) on the following timetable:

- For Spring semester placement, submit application no later than the deadline set by the OASIS Student Teaching Coordinator. *Suite 2301 Stone Bldg.*
- For Fall semester placement, submit application no later than the deadline set by the OASIS Student Teaching Coordinator. *Suite 2301 Stone Bldg.*

Applicants are specifically **not** guaranteed assignment to their home county nor to the immediate and general vicinity of the campus. Submission of an application by a candidate constitutes an agreement to accept assignment in the school and county where it is determined that the candidate's academic program objectives for student teaching can best be achieved.

A candidate is expected to meet professional standards as expressed in the pertinent school laws of the State of Florida. Candidates are also informed that, consistent with applicable law, information pertaining to all matters of public record, such as arrest and/or convictions in a court of law, may be routinely furnished to public schools as well as prospective employers.

For more information, visit <https://education.fsu.edu/student-resources/student-academic-services-oasis/student-teaching>.

Planning Guide to Educator Preparation Programs

Inventory of State-Approved Programs

The following College of Education graduate programs have been approved by the Florida Department of Education (DOE) as Initial Certification Educator Preparation Programs:

- Educational Leadership/Administration (Certification Area: Educational Leadership)
- Elementary Education (Certification Area: Elementary Education grades K-6 with endorsements in ESOL and Reading)
- English Teaching (Certification Area: English grades 6–12 with an ESOL endorsement)
- School Counseling (Certification Area: School Counseling grades P–12)
- School Psychology (Certification Area: School Psychology grades P–12)
- Social Science Teaching (Certification Area: Social Science grades 6–12)
- Special Education Teaching (Certification Area: Exceptional Student Education grades K-12 with endorsements in ESOL, Autism and Reading)
- Visual Disabilities (Certification Area: Visual Impairment grades K–12)

The following undergraduate and/or graduate programs have been approved by the DOE as Initial Certification Educator Preparation Programs; they are listed with the name of the Florida State University College in which they are located:

- Art Education (grades K–12), College of Fine Arts
- Applied Geosciences/FSU Teach (grades 6–12), College of Arts and Sciences

- Biology/FSU Teach (grades 6–12), College of Arts and Sciences
- Chemical Science/FSU Teach (grades 6–12), College of Arts and Sciences
- Environmental Science/FSU Teach (grades 6–12), College of Arts and Sciences
- Mathematics/FSU Teach (grades 6–12), College of Arts and Sciences
- Physical Science/FSU Teach (grades 6–12), College of Arts and Sciences

Continuation and Graduation Requirements of an Educator Preparation Program

Students must meet the following requirements to continue and graduate from an Educator Preparation program:

1. Maintain an overall graduate GPA of 3.0 or above in all coursework (some programs may require a higher GPA);
2. Complete standards and specific coursework requirements set by the program;
3. Meet all University graduation requirements, including requirements mentioned in this Bulletin under 'Planning Guide to Educator Preparation Programs';
4. Achieve a passing score on each section of the General Knowledge Test on the Florida Teacher Certification Exam (FTCE) prior to completion of the first semester of enrollment in the Educator Preparation graduate degree program;
5. Achieve a passing score on the General Knowledge Test, the Professional Education Skills Test, and Subject Area Test on the Florida Teacher Certification Exam (FTCE) prior to completion of degree program requirements;
6. Successfully complete the student teaching experience;
7. Receive verification from the appropriate academic program of successful demonstration of the Educator Accomplished Practices at the pre-professional level, which includes the knowledge, skills and dispositions necessary to help all students learn; and
8. Obtain final approval of the appropriate academic program and the Office of Academic Services and Intern Support.

These requirements are distinct from program completion/graduation requirements.

Professional Behaviors and Dispositions

While enrolled in educator preparation programs, the student is expected to demonstrate positive behaviors and dispositions that conform to the "Code of Ethics" (State Board of Education Rule 6B-1.00 FAC) and the "Principles of Professional Conduct in Florida" (State Board of Education Rule 6B-1.006 FAC). The programs reserve the right to refuse or discontinue enrollment of any student who violates these expectations or in the judgment of a majority of the program faculty does not meet the program standards. Information on professional behaviors and dispositions can be found on the Educator Preparation website: <https://education.fsu.edu/student-resources/student-academic-services-oasis/educator-preparation>.

Criteria for Admission to Student Teaching

The following criteria must be fulfilled prior to placement for student teaching:

1. Admission to Teacher Education outlined under 'Requirements for Admission to an Educator Preparation Program';
2. Completion of at least one semester in residence at Florida State University;
3. Successful completion of all program requirements prior to the student teaching semester;
4. Successful completion of Subject Area specialization and Professional Education coursework outlined under 'Clinical Experience';
5. Completion of departmental requirements in computer literacy;
6. An overall GPA of 3.0 in all graduate program coursework (a higher GPA may be required by some academic programs for particular core courses); and
7. Successful completion of pre-internship clinical experience requirements as set by the program or the University.

FAMU—FSU COLLEGE OF ENGINEERING

GRADUATE

Dean: J. Murray Gibson; **Associate Deans:** Michelle Rambo-Roddenberry, Farrukh Alvi, Mark Weatherspoon

The FAMU-FSU College of Engineering was authorized by the 1982 Legislature as a joint program between Florida A&M University and Florida State University. Graduate programs of study lead to the Master of Science (MS) degrees and Doctor of Philosophy (PhD) degrees in biomedical, civil, chemical, electrical, industrial, and mechanical engineering. A Master of Engineering (MEng) degree program in civil engineering and an MS degree in systems engineering are also available. A student entering the college applies for admission at one of the two universities and must satisfy the admission and general degree requirements of the university, the college, and the department. The degree is granted through the College of Engineering by the university where the student is enrolled. All College of Engineering classrooms and administrative and faculty offices are housed in a modern engineering complex located at 2525 Pottsdamer Street in Innovation Park.

The mission of the College of Engineering is as follows:

- To provide an innovative academic program of excellence at both the undergraduate and graduate levels, judged by the highest standards in the field and recognized by national peers;
- To attract and graduate a greater number of minorities and women in professional engineering, engineering teaching, and research; and
- To attain national and international recognition of the college through the educational and research achievements and the professional service of its faculty and students.

Facilities

The college occupies over 200,000 square feet of classroom, office, and laboratory space in a building complex especially designed for engineering education. It is located less than three miles from each main campus in an area adjacent to Innovation Park, which also houses the following research facilities: the National High Magnetic Field Laboratory (NHMFL); the Aero-Propulsion, Mechatronics and Energy Center (AME); the Center for Advanced Power Systems (CAPS); the High Performance Materials Institute (HPMI); and other university, public and private organizations engaged in research, development, and entrepreneurship. The college also maintains other research centers, including the Applied Superconductivity Center (ASC), Center for Accessibility and Safety for an Aging Population (ASAP), Center for Intelligent Systems, Control, and Robotics (CISCOR), Energy and Sustainability Center (ESC), Florida Center for Advanced Aero-Propulsion (FCAAP), and the Future Renewable Electrical Energy Delivery and Management (FREEDM) Systems Center.

Each department of the college operates specialized laboratories for teaching and research that are listed in the department sections of this *General Bulletin*. In addition, the college operates computing facilities, a library and reading room, as well as a machine shop and electronics shops for the common use by all programs.

Library

The mission of the Engineering Library is to support and enhance the learning, teaching, research, and service activities of the FAMU-FSU engineering communities by providing organized access to quality information in all formats, promoting information literacy, preserving information, and engaging in collaborative partnerships to disseminate ideas for advancing intellectual discovery. The main book and journal collections for engineering are housed in the Dirac Science Library at Florida State University and in the Coleman Library at Florida A&M University. The Engineering Library is a satellite for both university libraries and houses a small collection along with extensive access to electronic collections. Materials not available at the library may be requested through Interlibrary Loan or U-Borrow.

The library is serviced by a full-time librarian and several assistants who offer research assistance in person, over the telephone, and via e-mail and text. Instruction in library and information literacy is available to classes and groups upon request.

Library services also include Flip video cameras, laptops, headphones, and other technology that is available for check out upon request. Modern group study tables, lounging stations, and tutoring areas are in the Engineering Library for student use.

Computing Facilities

Students have access to various computing resources at the College of Engineering. The college has over 2,000 computing devices connected to its local network, managed by College Computing Services (CCS). Computers connect to the college's network via 1Gbps and 100Mbps Ethernet connections, as well as a high-speed wireless LAN. Over 200 high-end Intel-compatible workstations are provided for general student use. These computers are housed in four labs: one of the computer labs is open 24 hours a day when classes are in session, while the other three are used primarily as classrooms. The college also provides workstations in public areas that are available to students 24 hours a day, 365 days a year. A group of Linux Windows servers backed by a Storage Area Network provide a range of computing services to the college user community. CCS continues to evaluate and upgrade computer capabilities as computational needs grow. Additionally, both universities provide on-campus facilities that are available to all students. To support the instructional and research missions of the college, a variety of software packages is provided, including major general-purpose packages, as well as special applications oriented toward particular disciplines. Research labs at the college contain dozens of computational systems to provide enhanced research capabilities, including complex number crunching for simulations. College researchers also take advantage of shared computational clusters located on the engineering campus and at each university. The college's computing infrastructure uses high-end core router/switches interconnected to edge switching via gigabit fiber. The college internet connection is a gigabit link connecting through the Florida State University backbone (Florida State University acts as the network manager and internet services provider for the college) allowing for fast access to the Internet2 and the LambdaRail network. Florida A&M University's computing facilities are also connected to the Tallahassee MAN, thus providing a link to the college for its students. The college has state-of-the-art instructional classrooms. The multimedia equipment in every classroom generally includes LCD projector, document camera, BluRay player, and sound system. The ceiling-mounted LCD projector is used for large-scale projection and is linked to the PC at the instructor's console. Multiple rooms are used for distance learning; these rooms have additional equipment to support synchronous and asynchronous instructional delivery. Distance delivery of classes to/from the FSU Panama City campus occurs regularly, and distance-learning collaborations with other universities are frequent. Live and recorded programs, classes, and events are streamed via the Internet to authorized viewers. Multi-point IP videoconferencing is also available.

Supporting Facilities

Other nearby resources include the following: the FSU Information Technology Services; the National High Magnetic Field Laboratory (the 'Mag Lab'); the Center for Advanced Power Systems (CAPS); the High-Performance Materials Institute (HPMI) and the Aero-Propulsion, Mechatronics and Energy Center (AME). Information on additional research centers affiliated with the College of Engineering is available at <http://www.eng.famu.fsu.edu/research>. The college also operates the Tallahassee Challenger Learning Center, a K-12 STEM outreach facility serving the southeastern United States. Located in downtown Tallahassee, the center houses a 3-D IMAX theatre, planetarium, and a Challenger Space Mission simulator with Control Center. Other supporting facilities are Northwest Regional Data Center (NWRDC), Florida Department of Transportation research facilities, WFSU Public Broadcasting television and radio stations, as well as FAMU Information Services.

Opportunities

A large number of graduate students in the College of Engineering are supported through department teaching or research assistantships. University fellowships are available for exceptionally qualified students. In addition, tuition waivers for graduate assistants and fellows are available on a competitive basis. Students should contact the department of their proposed major regarding financial support.

Master of Science (MS) Degree

The departments of Chemical and Biomedical, Electrical and Computer, Industrial and Manufacturing, and Mechanical Engineering, offer both thesis and non-thesis programs for the Master of Science degree. The department of Civil and Environmental Engineering offers a thesis program for the Master of Science degree. The department of Industrial and Manufacturing

Engineering offers specialized, non-thesis programs in engineering management and systems engineering. The thesis-based programs are designed to provide the student with advanced coursework and experience in the chosen engineering discipline. The non-thesis programs are designed to provide the student with a strong technical education with less emphasis on research. The thesis programs are appropriate for a student who plans to engage in research or to continue graduate studies for the doctoral degree. Candidates for the master's degree must satisfy all regulations and requirements of the department in which they enroll. Several departments in the college also participate in an Interdisciplinary Master of Science program in Materials. For additional departmental requirements consult the degree requirements under each department.

Master of Engineering (MEng) Degree

The Department of Civil and Environmental Engineering offers the Master of Engineering (MEng) degree program option. This is a non-thesis, coursework-only master's degree tailored to civil engineering professionals who are working in the field as well as for recent BS in Civil Engineering or BS in Environmental Engineering graduates. The option is designed for students who wish to pursue their advanced degree either part-time or on an accelerated one-year track. Please visit the Department of Civil and Environmental Engineering website at <http://www.eng.famu.fsu.edu/cee/> for more information.

Doctor of Philosophy (PhD) Degree

The Doctor of Philosophy degree is awarded after the student satisfies all requirements of the university, the college, and department. This degree is offered in biomedical, chemical, civil, electrical, industrial, and mechanical engineering.

Admission Requirements

A candidate must meet the following minimum criteria to be considered for admission into the graduate program:

1. An earned Bachelor of Science degree in engineering or a closely allied field from an accredited institution of higher learning or a comparable degree from an international institution.
2. A grade point average (GPA) of 3.0 or better on a 4.0 scale on all work while registered as an upper-division student.
3. Test scores from the Graduate Record Examinations (GRE). Applicants for non-thesis MS or MEng programs that meet certain specified criteria may be eligible to request a waiver of the GRE.
4. An international applicant whose native language is not English must have taken an English language proficiency exam within the last five years. Minimum test scores are set by individual academic departments. See the College of Engineering website at <https://www.eng.famu.fsu.edu/prospective/graduate/admissions-requirements> for more information.

For further details on graduate or research programs, contact the College of Engineering at (850) 410-6619 or by e-mail at gradstudies@eng.famu.fsu.edu. The college also maintains a website at <http://eng.famu.fsu.edu> with detailed information on all its graduate programs.

COLLEGE OF FINE ARTS

GRADUATE

Dean: James Frazier, EdD, MFA

The College of Fine Arts was formed in 2005, with the combination of the former School of Visual Arts and Dance and the School of Theatre. The College has six academic units:

- Department of Art
- Department of Art Education
- Department of Art History
- Department of Interior Architecture and Design
- School of Dance
- School of Theatre

These academic units offer an extensive program of instruction in all areas of the visual arts, theatre, and dance. In fact, nearly every level of undergraduate and graduate degree that a university can offer in these areas is represented within the College, including the established terminal degree in each discipline. Accordingly, the College is unique in the state of Florida.

Enhancement of the fine and performing arts is one of Florida State University's specific goals as presented in its mission statement. The comprehensive nature and consistent quality of the College may be credited in large part to the recognition and support for the arts evident in the University. The very idea of arts training within a university context is held to be fundamentally important to an individual's education in today's society. The College of Fine Arts shares much in common with an independent arts school, but the differences are more important than the similarities. The University strives toward education of the whole person, and it has a great variety of cultural and curricular resources to reach this end. Therefore, our students have the opportunity to benefit from the entire University, a warm and friendly residential college and major graduate research institution. There is no substitute for this environment.

The College promotes the visual arts, design, theatre, and dance within this community. Its goal is to provide a broad-based liberal arts education for students, while at the same time training them to be dancers, actors, designers, artists, scholars, teachers, or other professionals in the field. It functions to enrich their lives and to provide them with the means of self-expression in an increasingly complex and impersonal technological society—a society ever more dependent upon visual language and information. The study and practice of the arts are therefore viewed as a necessary link in the educational system, both as a learning process and as a means of personal fulfillment. Measures are applied within the College—and indeed throughout Florida State University's campus—to keep the spirit of open inquiry vital and productive.

Regardless of the department of a student's major, the College of Fine Arts provides an unusual opportunity for working with a distinguished faculty of nationally and internationally recognized artists and scholars, all of whom teach undergraduate as well as graduate students.

Facilities

In addition to the lecture rooms, general classrooms, seminar rooms, and media-specific laboratories (e.g., printmaking, electronic imaging, ceramics, sculpture, photography, digital fabrication, and the like), four specialized facilities merit particular mention. First, art students in designated degree programs are provided individual studios, making it possible for them to work in a healthy environment that promotes the cross-fertilization of ideas and constructive debate. Students at different stages of development learn from each other as well as from their professors, who regularly come to their studios for tutorials and critiques. These studios are housed in the Carnaghi Arts Building. Second, dance students train in spacious, comfortable studios and perform in their own fully equipped professional dance theatre, experimental black box theatre, and grand studio; in addition, students explore dance technology in state-of-the-art labs, all within what are arguably the best university dance facilities in the country. Also, theatre students train and perform in four venues, including two traditional proscenium theatres, a lab theatre, and a stage for student-produced works. Finally, students in art education, art history, and interior architecture and design work in specifically designed and dedicated spaces in the newly renovated William Johnston Building located in the center of campus. Interior Architecture & Design students in their junior, senior, and graduate years have dedicated studio space to enrich their interaction and the creative process.

The Florida State University Museum of Fine Arts

The Florida State University Museum of Fine Arts is first and foremost an extension of the teaching mission of the College. Large, modern, and well equipped, it houses the permanent collection and several times a year hosts faculty and student shows, including MFA graduate exhibitions. In addition, the school faculty and the museum staff pride themselves on originating shows of national prominence, documented through professional and scholarly catalogs, often complemented by the efforts of graduate students. The Florida State University Museum of Fine Arts is a community resource of regional significance in the Southeast and is fully accredited by the American Alliance of Museums.

Maggie Allesee National Center for Choreography

The mission of the Maggie Allesee National Center for Choreography (MANCC) is to raise the value of the creative process in dance by providing (1) a model of support for professional choreographic creativity within a comprehensive, graduate research university, (2) access to a stimulating environment where experimentation, exploration, and life-long learning are both valued and encouraged, and (3) opportunities for engagement with the creative process in dance to the national field as well as our students, staff, faculty, and community.

Facility for Arts Research

The Facility for Arts Research (FAR) offers space and specialized equipment for experimental printmaking, spatial audio, electronics, and digital fabrication to researchers, faculty, and students as part of a rigorous interdisciplinary investigation into artmaking. FAR engages and educates 21st century makers in the collaborative, cross-disciplinary experiences of contemporary arts research, supporting and promoting the integration of digital and traditional art and design methods to create unique objects that might be impossible to make in other ways.

Specialized Study in Museum Theory and Practice

The College of Fine Arts, along with the College of Arts and Sciences, the College of Education, the College of Human Sciences, and the College of Communication and Information, offers an interdisciplinary program in museum theory and practice. The program prepares graduate or postgraduate students who wish to supplement their academic knowledge with specific expertise in the museum field. A strong emphasis is placed on preparing students for the profession with career guidance and planning, informal discussions with museum professionals, mentorships, and seminars on professional training. The program is available to graduate students in art education, art history, interior design, theatre, arts administration, classics, dance, history, as well as information studies, and it will continue to attract disciplines as it expands.

Program requirements consist of four core courses, a museum internship, and special projects and electives as determined by individual departments.

Study Abroad

The University offers many opportunities for international study open to all qualified state university students. Study-abroad programs range in nature from long-established study centers in Florence, Italy and London, England to recently developed programs in Spain and France. Operated by Florida State University, they provide the opportunity for a truly rewarding educational and cultural experience. Representing as it does a collegial body of students of the arts, the College of Fine Arts has had a particular affinity for the Florence program, one which has led to a history of involvement since the founding of the program in 1966, largely through the efforts of the art history faculty. In every year that it has existed, at least one member of the College faculty has taught in Florence, and the College has significant representation among the students studying there. More recently, greater emphasis has been placed on the opportunities at the London and Valencia Centers. Of particular significance to students of theatre is the London program, with its year-round theatre offerings. Students of theatre, art, dance, design, and art history flourish in the rich, humanistic environments of these magnificent cities and cultural centers. This they can do usually without disrupting their sequence of courses and without loss of residency since the Florence, London, and Valencia campuses are true extensions of the Tallahassee campus.

Athamor

For the past thirty-five years the College has published *Athamor*, a well-respected art history journal which presents scholarly articles by graduate students from universities across the nation. The journal results in part from an art history graduate student symposium conducted on campus each year. It is attended by students whose papers have been accepted for presentation and by distinguished art historians invited to address the symposium and to respond to the papers. This event proves to be of particular value to graduate students in art and art history.

Requirements of the College

Individuals seeking admission to one of the programs in the College should consult the appropriate *General Bulletin* and the department regarding admission processes and standards.

THE GRADUATE SCHOOL

GRADUATE

Dean: Mark Riley; **Senior Associate Dean:** Judith Devine; **Associate Deans:** Deborah Fadool, Brian Barton; **Assistant Deans:** Lisa Liseno, Adrienne Stephenson

The University's first graduate degree was a Master of Science (MS) degree in psychology that was awarded to Barbara Elizabeth James in 1903. Boris Gutbezahl, a student in the Department of Chemistry, was awarded the University's first Doctor of Philosophy (PhD) degree in 1952. The mission of the Graduate School is to advance the quality and integrity of graduate education. The Dean of the Graduate School is responsible for the broad oversight of all graduate programs. Florida State University offers an extensive range of graduate and professional programs through the fifteen colleges. Graduate education at FSU includes 112 master's degrees, 11 specialist and advanced master's degrees, and 70 doctoral degrees. Professional degrees are also offered in Law, Nursing, and Medicine. In addition, a variety of opportunities are available for students interested in advanced degrees, including interdisciplinary degree programs, joint graduate pathways, dual degrees, and combined bachelor's/master's degree pathways. Florida State University also offers several online academic degree programs and graduate certificate programs. Details about these programs can be found in the appropriate department chapter of this *Graduate Bulletin*, and online at The Graduate School Web site at <http://gradschool.fsu.edu>.

Degree Programs Administered by the Graduate School

The Graduate School administers the interdisciplinary master's and PhD programs in Materials Science and Engineering. See the "Interdisciplinary Program in Materials Science and Engineering" chapter of this *Graduate Bulletin* for details.

Offices, Centers, and Special Programs

The **Office of Graduate Fellowships and Awards**, a unit of the Graduate School, assists current graduate students in identifying and applying for external fellowships, grants, and awards. The office provides a variety of workshops and events to introduce national funding opportunities, teach strategies for creating competitive applications, and discuss relevant campus policies and procedures. Additionally, students may seek one-on-one support as they polish their proposals. For more information, call (850) 645-0850, e-mail ogfa-info@fsu.edu or visit the Web site at <http://ogfa.fsu.edu>.

The **Frederick L. Jenks Center for Intensive English Studies (CIES)** provides intensive instruction in the English language to non-English speakers. Its primary target audience is international scholars who are preparing to pursue degree work in American colleges and universities. In addition, CIES evaluates the English speaking proficiency of FSU's international Teaching Assistants (TAs) through its administration and scoring of the SPEAK test. Along with this assessment, the Center provides credit-bearing classes for those prospective international TAs who need further development of their speaking proficiency in English. CIES also offers a seven-week Certificate in Teaching English as a Foreign Language for FSU students or any in the community who wish to go abroad to teach English. For further information, call (850) 644-4797 or visit the Web site at <http://cies.fsu.edu>.

The **Program for Instructional Excellence (PIE)** is a University program that helps prepare graduate student teaching assistants (TAs) for their instructional role at FSU and their future career in academia. The PIE program also supports departmental TA training. Through its programs PIE creates opportunities to foster a sense of collaboration and community among graduate student TAs. For more information, see the 'Professional Development' section in this chapter or visit the PIE Web site at <http://pie.fsu.edu>.

The **Fellows Society** is an interdisciplinary scholarly community consisting of graduate students who hold competitive national fellowships and University-wide fellowships administered by The Graduate School. The mission of the Fellows Society is to have Fellows participate in regular events, including the Fellows Forum, the Annual Induction and Networking Session, President's Social, monthly research sharing luncheon series, and other special events designed to expand the intellectual horizons of its members through the interdisciplinary engagement and leadership development. For more information, visit <http://gradschool.fsu.edu/fellows-society>.

Fellowships, Assistantships, and Awards

The Graduate School administers several internal University-wide fellowship and award programs to support or recognize the achievements of new and returning graduate students. In addition, many graduate students receive financial support (stipend and tuition waivers) as Teaching Assistants, Research Assistants, or Graduate Assistants. Interested students should contact The Graduate School, departments, and administrative units directly for more details and information.

Each Spring, FSU graduate students are recognized for their outstanding contributions in teaching, research and creative endeavors, and leadership at the *Celebration of Graduate Student Excellence*. These awards include the University's Outstanding Teaching Assistant Awards, the Graduate Student Research and Creativity Awards, the Graduate School Student Leadership Award, and nationally competitive fellowships and awards.

Details of these programs, with updated deadlines and due dates, are provided each year on the Graduate School Web site at <http://gradschool.fsu.edu>.

Professional Development

Professional development, improving and increasing one's skill sets, is important at every stage of graduate education and beyond. For example, improving one's oral and written communication skills and developing an understanding of ethical behavior in research and creative endeavors are types of professional development. At FSU, numerous professional development opportunities are offered by academic departments/programs, the Career Center, and the Graduate School.

The **Preparing Future Faculty (PFF)** program assists doctoral and terminal master's students in preparing for faculty work. Through participation in coursework, workshops, mentoring, and interviewing faculty at other institutions, PFF candidates increase awareness of expectations for faculty performance and of resources available to aid in scholarly careers, and build their readiness to address teaching, research, and related demands of faculty life. PFF program requirements and activities are organized around the keystones of: Teaching Preparation, Research Preparation, Career Development, Mentoring, and Portfolio Development. In order to begin working toward earning the Preparing Future Faculty Academic Certificate, students must complete and submit an application. For more information or to schedule a meeting, contact Dr. Judith Devine, at (850) 644-3886 or jdevine@fsu.edu. To earn the PFF Certificate, candidates must complete a minimum of twelve graduate hours in the areas of Teaching Preparation, Research Preparation, and Career Development. Events are either discipline-specific or campus wide. All FSU doctoral and terminal master's students are eligible to participate, as are FSU post-doctoral scholars and adjunct/visiting faculty. Candidates who meet specified requirements, often involving participation over a two-year period, are awarded a completion certificate, but PFF events are open to graduate students/postdoctoral scholars/visiting faculty regardless of whether they intend to earn a completion certificate.

FSU's PFF program coordinates with the national Preparing Future Faculty initiative of the Council of Graduate Schools and the Association of American Colleges and Universities, involving forty-five doctoral degree-granting institutions and more than 300 partner institutions.

To learn more about FSU's PFF program, check with your academic department, visit <http://www.gradschool.fsu.edu/professional-development/preparing-future-faculty-pff>, or call The Graduate School at (850) 644-3501.

The **Preparing Future Professionals (PFP)** program assists graduate students in preparing for work outside of academia (e.g., government, non-profits, industry). The PFP program provides opportunities for PFP candidates to improve their readiness for the workforce, whether in the United States or internationally. PFP program requirements and activities are organized around the keystones of Content (skills in the discipline), Ethics/Scholarly Integrity, Professional Preparation (transferable skills), and Portfolio. In order to begin working toward earning the Preparing Future Professionals Academic Certificate, students must complete and submit an application. For more information or to schedule a meeting, contact Dr. Judith Devine, at (850) 644-3886 or jdevine@fsu.edu. To earn the PFP Certificate, students must complete a minimum of twelve graduate hours in the areas of Content, Ethics/Scholarly Integrity, and Professional Preparation. In addition to the coursework requirement, PFP candidates attend professional development workshops, complete an internship/practicum or interviews in the field, and develop a résumé and a portfolio. All FSU graduate students and postdoctoral scholars are eligible to participate. Candidates who meet specified requirements by the time of gradu-

ation are awarded a completion certificate, but PFP events are open to graduate students and postdoctoral scholars regardless of whether they intend to earn a completion certificate.

To learn more about the PFP program, check with your academic department, visit <http://www.gradschool.fsu.edu/professional-development/preparing-future-professionals-pfp>, or call The Graduate School at (850) 644-3501.

Another approach to professional development is the series of workshops offered during the academic year for FSU graduate and postdoctoral students. Working closely with outstanding research faculty, administrators, the FSU Center for Leadership and Social Change, the Center for Global Engagement, and the Career Center, the FSU Graduate School offers a wide range of workshops designed to equip students to achieve their educational and career goals. Descriptions of the professional development workshops for the academic year are located at <http://www.gradschool.fsu.edu/professional-development/professional-development-workshops>.

Each Spring, the Graduate School also offers a one-hour graduate course in professional ethics, **Responsible Conduct of Research and Creativity (RCRC)**. The course provides graduate students a practical overview of the professional practices that define the responsible conduct of research and creative endeavors. Practice in ethical decision-making and discussion of possible situations of misconduct are crucial elements of the course. The course explores all nine core instructional areas of RCRC (e.g., Research Misconduct, Human Subjects, Animal Welfare, Conflicts of Interest, Authorship). For more information about the RCRC course, visit <http://www.gradschool.fsu.edu/academics-research/research-and-scholarly-integrity>, or contact The Graduate School at (850) 644-3501.

The **Program for Instructional Excellence (PIE)** serves as a teaching resource for graduate student teaching assistants (TAs) and departments. Each year, during the week preceding the Fall semester, a university-wide, two-day teaching conference/TA orientation is held for teaching assistants. The conference, an orientation to FSU teaching resources, policies, and best practices of learning and teaching, accommodates TAs across disciplines with varied teaching responsibilities. All instructors are invited to participate in any part of the conference they feel might be useful. University administrators, organizations, faculty, and experienced teaching assistants take part in this program, offering advice and conducting sessions on all aspects of undergraduate teaching at FSU. As a continuation of the PIE Teaching Conference, PIE offers online and face-to-face workshops to enhance teaching throughout the Fall, Spring, and Summer semesters.

PIE also sponsors FSU's teaching associate program to assist with departmental teaching assistant training. A PIE Teaching Associate is an experienced graduate student TA nominated by his/her academic department and trained by PIE. These graduate students serve as mentors for other TAs in their department and assist PIE with conferences and other events. This leadership role broadens skills and provides a deeper understanding and appreciation of teaching from a larger perspective. PIE Teaching Associates receive a stipend for an academic year appointment (Fall and Spring semesters). This stipend is in addition to the Teaching Assistantship stipend (and waiver) that will be provided by the department. Applications are accepted in the Spring for the following academic year. Appointments are made each year at the beginning of the Fall semester. For information regarding other programs for TAs offered through PIE or the PIE Teaching Associate Program, visit the PIE Web site at <http://pie.fsu.edu>, call (850) 645-7318, or e-mail pie-info@fsu.edu.

The **Office of Graduate Fellowships and Awards (OGFA)**, serves as an integral part of the professional development of graduate students. Through participation in face-to-face individual and group meetings, workshops, and ongoing mentoring and advising, graduate students engage in applying for nationally competitive fellowships and awards as a holistic process that includes but is not limited to early career development, academic portfolio building, and ongoing development of writing and communication skills. The Office of Graduate Fellowships and Awards offers online and face-to-face workshops during the Fall, Spring, and Summer semesters. All workshops qualify for PFP and PFP credit. To learn more about the Office of Graduate Fellowships and Awards, visit <http://ogfa.fsu.edu> or call (850) 645-0850.

COLLEGE OF HUMAN SCIENCES

GRADUATE

Dean: Michael D. Delp; **Associate Deans:** Gregory J. Harris, Joseph G. Grzywacz; **Eminent Scholar Chair:** Frank Fincham; **Deans Emeritae:** Hortense Glenn (deceased), Margaret A. Sitton (deceased), Penny A. Ralston, Billie J. Collier

The mission of the College of Human Sciences is to address global challenges and opportunities related to the physical, behavioral, and psycho-social factors influencing the health and development of individuals, families, and communities. Human Sciences is an interdisciplinary unit that prepares researchers and applied professionals who seek new knowledge about, and innovative solutions to the challenges of human health and quality of life in contemporary society.

Florida State University is the comprehensive human sciences doctoral-granting institution in the state of Florida. The College of Human Sciences is organized into two departments: Family and Child Sciences and Nutrition, Food and Exercise Sciences. In keeping with the University's status as a pre-eminent university and its role as a comprehensive graduate research institution, the college's program is based on the belief that intellectual development demands understanding of the theories, principles, and concepts in each area of study, and that research is an essential part of that endeavor. Both faculty and students are provided opportunities to test theories and advance knowledge through research and critical analysis of ideas.

Facilities and Fellowships

The College of Human Sciences has a computer laboratory with advanced software application and media equipment for faculty and graduate students to conduct research. The computer laboratory is located in the Sandels Building.

The Department of Family and Child Sciences (FCS) has three laboratories used to support our training and research mission. The specific topic of research varies depending on the faculty and students involved, but all activities focus on compressing the 17-year gap between scientific discovery and the application of research discoveries to strengthen individuals and families.

1. The **Center for Couple and Family Therapy (CCFT)** is the primary clinical training center for marriage and family therapy doctoral students and serves as a critical interface between the University and the greater Tallahassee community. The CCFT provides mental health services to individuals, couples, and families with a variety of presenting problems, including relationship distress, anxiety, grief and loss, parenting, premarital counseling, and involvement with the Child Welfare System. The CCFT is equipped for both intervention and observational research.
2. The **FSU Family Institute** located in the Longmire Building provides a laboratory space for basic and applied research on relational processes and outcomes in couples and families. It is equipped for observational studies, experimental research and the identification of relevant biomarkers, especially cardiovascular functioning. A particular strength of this facility is its extensive data base and ongoing study of romantic relationships in emerging adults.
3. The **Center on Better Health and Life for Underserved Populations** engages in both prevention and intervention research in health-related issues within the broader community and partners with agencies throughout the State with a focus on health disparities.

The Department of Nutrition, Food and Exercise Sciences (NFES) has several laboratories dedicated to research in a variety of areas. The research fields include food microbiology (biological safety level two), food science, nutrition science, and exercise physiology. These facilities are equipped with instruments and technologies to conduct studies across the research continuum, from molecular to whole organism, including cell culture, animal, clinical trials, and athletic performance. The NFES laboratories that enhance and enrich the student's education include:

1. **Cardiovascular Laboratory**, equipped to evaluate the effects of exercise and diet on autonomic control of blood pressure, central hemodynamics, and arterial stiffness in individuals with chronic diseases.
2. **Exercise Physiology Laboratories**, equipped to evaluate aerobic and anaerobic fitness, strength, and body composition.
3. **The Human Performance Laboratory**, designed for testing and training of competitive athletes of all ages, provides an opportunity for investigators to conduct multidisciplinary research in human and athletic performance, including the prevention and treatment of athletic injuries.

4. The **Nutrition and Food Instrument Laboratory** provides a setting for chemical, analytical, microbial, and sensory testing.
5. **Food Chemistry Laboratories**, equipped with spectrophotometers, various electrophoresis systems, an automated microplate reader and washer, freeze dryers, chromatographic systems, micro DSC, a water purification system, and food-analysis equipment.
6. The **Body Composition Laboratory** provides a setting for studies of bone and mineral metabolism that utilizes state-of-the art equipment and technology.
7. **Muscle Research Laboratory**, equipped to study molecular and cellular adaptations of skeletal muscle in wasting conditions (e.g. sarcopenia, cancer cachexia, etc.) and develop preventive and/or intervention methods for muscle wasting conditions using exercise and/or dietary supplements (or nutrients) with techniques of RT-PCR, Western Blotting, Immunohistochemistry, etc. The long-term goal is to establish a multidisciplinary approach using the most current magnetic resonance technology to develop translational research across disciplines and levels of biological organization to improve quality of life through proper exercise training and anti-muscle wasting supplements.
8. The **Nutrition, Body Composition and Metabolism Laboratory** is dedicated to the study of nutrient intake, energy metabolism, and skeletal muscle and adipose tissue dynamics and its effect on health. The relationship between muscle loss, obesity, and interacting body composition changes among different susceptible groups is a primary focus. The lab uses state-of-the-art nutritional assessment tools such as computerized tomography imaging analysis, DXA, BODPOD, and techniques for the measurement of energy intake and energy expenditure.
9. The **Applied Electrophysiology Exercise Laboratory** investigates the underlying mechanisms that affect cardiac and arterial smooth muscle physiology under normal and pathological conditions using animal models. Techniques include PCR, Western blotting, surface biotinylation, calcium imaging, electrophysiology, and pressurized artery myography.
10. **The Institute of Sports Sciences and Medicine (ISSM)** brings together clinical and basic science investigators whose research seeks to elucidate scientific and biomedical factors related to sport and exercise.
11. The **Center for Advancing Exercise and Nutrition Research on Aging (CAENRA)** within NFES addresses major issues affecting the aging population in an attempt to uncover some of the underlying mechanisms of aging. CAENRA focuses on developing unique exercise and nutritional interventions for the amelioration of chronic diseases and functional declines that occur in aging with the intent to enhance quality of life and longevity.

The individual departments of the college describe more fully the various facilities available; refer to them in the "Academic Departments and Programs" chapter of this *Graduate Bulletin*.

A number of states have made arrangements for their residents to have access to specific programs through the Academic Common Market, which allows their students to pay in-state tuition. Prospective out-of-state students may contact the college to determine their eligibility for the Academic Common Market.

College fellowships as well as graduate teaching and research assistantships are available. Nominations for these fellowships/assistantships are made by the department. See the "Academic Departments and Programs" section of this *Graduate Bulletin* for other scholarships and fellowships available.

Graduate Programs in Human Sciences

Master's Degree Programs

Exercise Physiology with a major in:

- Exercise Physiology
- Sports Nutrition
- Sports Sciences

Family and Child Sciences

Food and Nutrition with a major in:

Nutrition and Food Science

Doctor of Philosophy Degree Programs

Human Sciences with emphasis in one of the following:

Human Development and Family Science

Nutrition and Food Science

Exercise Physiology

Marriage and Family Therapy

Requirements

Minimum admission requirements include: 1) a baccalaureate degree from an accredited college or university; and 2) an academic average of at least 3.0 (on a 4.0 scale) on all work attempted while registered as an upper-division undergraduate student, or a 3.0 on a master's degree from an accredited approved institution, and 3) quantitative, verbal, analytical writing test scores on the general Graduate Record Examinations (GRE). All prospective students must take the GRE prior to admission regardless of their grade point average. Applicants for doctoral programs must have three letters of recommendation. Applicants for the master's program in Family and Child Sciences must submit three letters of recommendation, while those applying to master's programs offered by the Department of Nutrition, Food, and Exercise Science are required to submit two letters of recommendation. The PhD program in Human Sciences with emphasis in Human Development and Family Science and the PhD program in Marriage and Family Therapy require personal interviews of selected applicants prior to admission. Attainment of these minimum requirements does not guarantee admission to any program. Admissions decisions are based on assessments of all aspects of the student's application materials. We reserve the right to increase standards if warranted by enrollment limitations and by the number and quality of applicants.

Master's Degree Program

The master's degree has two types of programs: the thesis and non-thesis programs. The college offers three non-thesis options: special project, practicum, and the all-coursework option. See the "Academic Departments and Programs" section of this *Graduate Bulletin* for details about the requirements for each of these programs and to determine which options are available in the department.

Program policies have been developed in compliance with University policies for the master's degree programs. Policies are provided to students the first semester they enroll to guide them throughout their studies.

Doctoral Degree Program

The graduate faculty members in the College of Human Sciences have developed policies for the doctoral degree programs in compliance with the University's policies. Refer to the "Graduate Degree Requirements" chapter of this *Graduate Bulletin* for information about scholarly engagement, program of study, preliminary examination, prospectus, admission to candidacy, dissertation, and defense. Policies for doctoral degree programs are given to students the first semester they enroll. They give specific information and procedures to guide students throughout their studies.

There is no college-wide minimum course requirement; individual programs are planned to assist students in gaining sufficient mastery of their field to successfully complete the preliminary examination. All doctoral students in the College of Human Sciences take HOE 6366, Research Best Practices in Human Sciences (2). There is no college-wide foreign language, statistics, or other research tool requirement for the Doctor of Philosophy degree. Each department prescribes its own requirements.

JIM MORAN COLLEGE OF ENTREPRENEURSHIP

GRADUATE

Website: <http://jimmorancollege.fsu.edu>

Dean: Susan S. Fiorito; **Professors:** Fiorito, Kim, Schofield; **Associate Professor:** Clayton; **Assistant Professors:** Manchiraju, McQuerry; **Associate Lecturers:** Frazier, Garner, Langston, Parker, Steed; **Assistant Lecturers:** Baber, Breed, Garner, Griffin, Hackett, Hand, Lewis, McHaffie, McNees, Tatum, Whalen; **Instructional Specialists:** McLaughlin, Plant, Soto; **Jim Moran Professor:** Fiorito

Mission

It is the mission of the Jim Moran College of Entrepreneurship to inspire innovation, instill compassion, and ignite an entrepreneurial mindset in the next generation of leaders.

General Information

The Jim Moran College of Entrepreneurship, through its faculty, curricula, and programs, is committed to educating and developing its students for careers as future business executives and leaders.

As a result of its capable and dedicated faculty, the Jim Moran College of Entrepreneurship has been able to attract highly qualified students. These students have strong analytical and communicative aptitudes and have a spirit of enterprise and creativity. The interaction of these students with highly qualified faculty, coupled with well-designed program options, creates a stimulating learning environment.

Facilities

The Jim Moran College of Entrepreneurship is currently housed in two separate locations. The Jim Moran Building, which the school shares with the Jim Moran Institute, is located at 111 S. Monroe and is ideally located near the center of downtown Tallahassee. It contains a modern classroom, faculty and staff offices, and numerous support facilities such as a student incubator. The location of this building is ideal for connecting entrepreneurship students with the business community in which we live. The Jim Moran College of Entrepreneurship also has an on-campus location in the Shaw Building. This location contains faculty and staff offices, a student collaboration room, a conference room, a body-scanning lab, a fabric-printing lab, and one classroom. Textile labs and the Historic Costume Collection are temporarily housed in the Sandels Building. The Office Depot Lab, Computer Aided Design Lab, and the Macy's Visual Merchandising Lab are housed in the William Johnston Building.

Programs Offered

The **Master of Science in Retail Entrepreneurship with a major in Textile and Apparel Entrepreneurship** program is designed to address the innovative approaches to textile testing and analysis, manufacturing, distribution, and product design and development while exploring new technologies and gaining a better understanding of the advancements in the current textile and apparel industry. The program is designed to allow students to complete the degree at a full-time or part-time pace, with both on-campus and online classes available.

The online **Master of Science in Entrepreneurship with a major in Hospitality Entrepreneurship** in the MSE program will focus on entrepreneurial endeavors in hospitality – opening, building, or innovating new hospitality enterprises. The program will rely heavily on the acquisition and application of skills in real-world entrepreneurial hospitality enterprises. This degree will provide advanced online education to allow graduates to pursue careers in a variety of corporate, government and/or academic professions.

The **Master of Science in Entrepreneurship with a major in Product Development** will prepare individuals who seek to work in any company, private or public, advancing their knowledge and skills in product design and development. The core curriculum of the proposed program will include topics in financial literacy and accounting, strategy and ethics in management. The classes offered in the product development major will allow us to provide students with hands-on experience in innovation and commercialization, further developing their abilities to implement their education from the MSE program in today's highly competitive and lucrative field of entrepreneurship.

Admission Standards

Students considered for admission to the college must present a 3.0 upper-division grade point average (GPA) as an undergraduate and a minimum GRE score determined by the department. **All applicants to the college must submit an official GRE score to the University as part of the admission process.** Individual departments may have additional requirements for admission. Students should consult the appropriate department chapter of this *Graduate Bulletin* for details.

Study Abroad

The University offers many opportunities for international study open to all qualified state university students. Study-abroad programs range in nature from long-established study centers in Florence, London, Valencia, and Panama. Operated by Florida State University, they provide the opportunity for a truly rewarding educational and cultural experience. This can be done without disrupting their sequence of courses and without loss of residency since the Italy, England, Spain, and Panama campuses are true extensions of the Tallahassee campus.

COLLEGE OF LAW

GRADUATE

Dean: Erin O'Hara O'Connor; **Associate Deans:** Shawn Bayern, Nancy L. Benavides, Courtney Cahill, Jeffrey Kahn, David E. Landau, Manuel Utset; **Assistant Deans:** Debra Henley, Jennifer Kessinger, Catherine Miller, Maribel Roig, Glenda L. Thornton; **Director of Development:** Hovik Arakelian; **Director of the Research Center:** Elizabeth Farrell Clifford

The Florida State University College of Law's highly-accomplished and accessible faculty delivers a program with a liberal-arts orientation designed to produce well-rounded and effective lawyers.

U.S. News & World Report (2019) ranks the College of Law as the forty-eighth best law school in the nation. Florida State's environmental program is ranked the nation's ninth best. *National Jurist* magazine consistently ranks Florida State one of the nation's "Best Value" law schools. According to a 2018 study of law faculty scholarly impact, our faculty is number one in Florida and twenty-ninth nationally.

Florida State University College of Law students have extremely strong credentials. The current student body represents 33 U.S. states, 22 countries, and 266 colleges and universities. The 2019 entering class has a median LSAT of 160 and a median GPA of 3.73. Students continue to succeed after they enroll in our school. Since 2010, the Moot Court Team has won first place in fifteen national competitions and in one international competition. In 2019, for the eighth time since 2008, Florida State's Student Bar Association received the national Student Bar Association Award, a top honor, from the Law Student Division of the American Bar Association. Our Black Law Students Association (BSLA) has been named National Chapter of the Year four times since 2011.

The law school places great value on close working relationships among students and faculty. Students consistently say that the accessible faculty of experts is what makes their law-school experience outstanding. The dynamic faculty is comprised of nationally and internationally recognized scholars who make it a priority to be available to students inside and outside of the classroom. Many of our law professors have worked at prestigious national law firms. The faculty is very much at "the cutting edge." They are productive and successful, and want students to be, too.

Florida State University offers law students a wealth of legal employment opportunities. The unique legal opportunities that accompany being located in a state capital are invaluable. The experiences that FSU Law students have in Tallahassee and around the globe translate into careers all over the world. Tallahassee is home to more than 500 law firms and numerous government agencies. Florida State Law is just steps away from the state capitol, the Florida Supreme Court, and the United States District Court for the Northern District of Florida. In their second and third years of law school, students have ample opportunity to work part-time in private law firms, with trial or appellate courts, at the Florida Legislature, or for government agencies.

Florida State College of Law graduates are highly valued in the legal marketplace. Florida State consistently has one of the best job placement rates in Florida and the region. The College of Law alumni network is a primary reason why our graduates fare so well in the legal job market. Alumni are extremely engaged in helping to connect students with job opportunities. From practicing attorneys to business and government leaders, alumni frequently appear as guest lecturers or adjunct professors. Many come to campus or engage by videoconference technology to provide job search and career advice to students. Many host receptions in their communities to help students network. More than 1,000 alumni have specifically volunteered to serve as Career Mentors, helping students with job placement in Florida and around the world.

The College of Law offers unique programs to undergraduates interested in attending law school. Under a 3+3 Accelerated Bachelor's/JD Program, students attending one of our six partner institutions who meet certain admission requirements can complete a bachelor's degree and a law degree in six years rather than the traditional seven, saving a year of time and costs. Undergraduate students who gain admission into the JD program through the 3+3 program will follow the usual prescribed course of study for full-time, first-year law students. Upon successful completion of the first year of law school, the thirty credits earned will be counted toward the undergraduate degree, sufficient to complete university requirements for the bachelor's degree. The Juris Doctor degree will be awarded upon successful completion of the required minimum eighty-eight total course credits in the law school (including the thirty hours earned as part of the 3+3 program) and all other JD graduation requirements. The College of Law has similar 3+3 programs with other institutions.

The Donald J. Weidner Summer for Undergraduates program is the largest of its kind and has become a model for other law schools in the nation. Each year, approximately sixty undergraduate college students are chosen to par-

ticipate in this month-long program that exposes students to the law school experience. During the program, undergraduates attend daily classes taught by law-school professors and writing instructors. Lectures familiarize students with the functions of the American legal system and the process by which conflicts are resolved. Writing workshops help students develop their writing and communication skills. In addition to classes, the program provides guest lecturers from the legal community and includes observation of courtroom proceedings and visits to local law firms. The Florida State University College of Law provides room and board, course materials, and a \$500 stipend to all participants. Students are responsible for their travel to and from Tallahassee. For more information about this program, please contact the *Office of Student Advancement* at (850) 644-7338 or send an email to summerprogram@law.fsu.edu.

The College of Law also offers an honors program to Florida State University undergraduates. Each year, a select number of Honors Program undergraduate students are invited to apply to the Florida State University Honors Legal Scholars Program. This competitive program provides honors students the opportunity to become members of the law school community as undergraduate students. As a member of the Honors Legal Scholars Program, students have the unique opportunity to meet and interact with College of Law faculty and administrators, observe law classes, attend law school events and lectures, and gain valuable information and insight into law school and the legal profession. Upon completion of their bachelor's degrees, these scholars will receive automatic admission to the FSU College of Law, provided that they complete and submit an FSU law school application; have an LSAT score of 161 or higher, or a Verbal GRE score of 160 or higher, and an undergraduate GPA of at least 3.75; and have a record that reflects the fitness of character to study law. For more information about this honors program, please contact the Admissions Office at (850) 644-3787 or admissions@law.fsu.edu.

Curriculum and Special Programs

The College of Law's three-year curriculum for the Juris Doctor (JD) degree is rich and diverse; it begins with traditional courses and expands to include the latest in theoretical and interdisciplinary analyses. The school has especially strong programs in environmental law, international law, business law, and criminal law, with certificate programs in the first three areas.

The College of Law has five co-curricular academic organizations, including three student-edited journals and trial and appellate advocacy teams. The journals include the *Florida State University Law Review*, the *Journal of Land Use & Environmental Law*, and the *Journal of Transnational Law & Policy*. The College of Law's advocacy teams are regionally and nationally competitive.

The College of Law offers a Master of Laws (LLM) in American Law for Foreign Lawyers, which provides law-trained foreign graduate students with the opportunity to develop an understanding of the American legal system and the role of law in the United States. The LLM in American Law degree requires students to complete twenty-four credit hours, within three years (an American LLM student may not take more than thirty-five law credit hours).

The College of Law also offers a Master of Laws (LLM) in Business Law, which gives Juris Doctor (JD) holders and law-trained foreign graduate students training in advanced business law and finance in areas of growing demand, such as regulatory compliance, in-house counsel and financial regulation. The LLM in Business Law degree requires students to complete twenty-four credit hours, within three years (a Business LLM student may not take more than thirty-five law credit hours).

Building on its highly ranked environmental law program, Florida State Law offers a Master of Laws (LLM) in Environmental Law and Policy, which gives Juris Doctor (JD) holders the opportunity to concentrate in or enhance their knowledge of environmental law, land use law, and energy law. The LLM in Environmental Law degree requires students to complete twenty-four credit hours, within three years (an Environmental LLM student may not take more than thirty-five law credit hours).

The College of Law offers a Juris Master (JM), a one-year master's program in law that is intended for those who possess a bachelor's degree and who want to advance their careers with a year of legal studies and training. The program is flexible with few required courses – students can tailor their curriculum for their specific professional advancement goals. The Juris Master degree requires students to complete thirty credit hours, within three years (a JM student may not take more than forty-five law credit hours). The Juris

Master program can be completed on-campus or online. The latter offers students three concentrations: Financial Regulation and Compliance; Health Care Regulation; and Legal Risk Management and HR Compliance.

Additionally, the College of Law offers one of the most extensive externship programs in the United States, with more than one hundred placements throughout Florida and elsewhere. Clinics at the law school's **Public Interest Law Center** provides "live client" training for second- and third-year students on a wide variety of legal services, specializing in everything from family law cases, to juvenile delinquency cases, to immigration advocacy. In addition, students in the Business Law Clinic learn transactional skills and earn academic credit by helping advise business and social entrepreneurs within the Florida State University community.

The College of Law offers nine joint graduate pathways in cooperation with other colleges, schools, and departments at Florida State University. The joint degrees bring together the study of law and oceanography and aquatic environmental sciences, business, information law, information technology, international affairs, public administration, social work, sport management, as well as urban and regional planning.

Summer Program in Law at Oxford

The College of Law conducts a summer program at Oxford University in England. As the oldest ongoing program in Oxford sponsored by a U.S. law school, this program provides students with a unique opportunity to study comparative law and the history of the English common law and its institutions in their native setting. Since its establishment in 1973, approximately forty-five law students from the United States and Canada as well as a limited number of graduate students in related fields, lawyers, and others have been taught by tenured members of the Oxford University and The Florida State University law faculties.

Questions concerning the application and program may be directed to Shirley Oglesby, Assistant to the Director, (850) 645-0926 or at <https://law.fsu.edu/academics/academic-programs/study-abroad/oxford>

Academic Policies

All academic policies of the College of Law can be found at: <https://law.fsu.edu/academics/academic-resources/academic-rules-policies>.

Admission Requirements

For August admission, students must apply between September 1 and July 31, or by the deadline published by the College of Law. The College of Law enrolls only one JD class in the fall of each year and does not offer a part-time or evening program. Submit and complete an application as early as possible.

Factors considered by the admissions committee include numerical credentials (LSAT and GPA), exceptional personal talents, interesting or demanding work or service experience, leadership potential, rigorousness of the undergraduate course of study, maturity, a history of overcoming economic or other social hardships, ability to communicate effectively, and other factors. Decisions on applicant files are made as early as October.

One of the greatest strengths of the College of Law is its student body, which currently represents 33 U.S. states and territories, 22 countries, and 266 colleges and universities.

Admission to the College of Law is a competitive process; the 2019 class had a median LSAT score of 160 and a median GPA of 3.73.

All registrants are required to have a baccalaureate degree from a regionally accredited college or university prior to commencing law study. Every prospective law student must take the Law School Admissions Test given by the Law School Admission Council, or the GRE given by Education Testing Services (ETS). For more information about the LSAT, please visit <http://www.lsac.org>. Registration with the Credential Assembly Service is also required. For more information about the GRE, please visit <http://ets.org>.

Juris Master students are admitted for the Fall, Spring, and Summer semesters. All application deadlines are posted online.

Applications for the LLM Program in American Law should be submitted by June 1 and students in the program begin studies during the fall semester.

Applicants for the LLM in Environmental Law and Policy program may apply for fall semester admission, with a completion deadline of July 15, or for spring admission, with a completion deadline of November 15.

For more information about the admissions process, please visit <http://www.law.fsu.edu/admissions-financial-aid/admissions/jd-procedures> or call (850) 644-3787.

Student Services

The **Student Advancement Office** is responsible for coordinating a number of different services, activities, and programs for the benefit of all law students. The Student Advancement Office assists students in all facets of student

life, from financial aid to the adjustment to law school. The **Career Services and Professional Development Office** assists students in finding employment both during and after law school. The primary goal of the Career Services Office is to provide students and alumni with the tools and skills that they need to launch successful job searches and fulfilling legal careers.

The Academic Programs Office was created in 2017 to provide more personalized guidance to students on course selection and to offer enhanced legal writing and other academic support. The office is also dedicated to helping students and recent graduates as they prepare for bar exams. FSU Law also has a full-time bar support professor, whose sole focus is helping students prepare for bar exams and who has a strong record of preparing test-takers for success.

The law school **Research Center** is a dynamic, highly responsive force in the life of the College of Law. An indispensable resource for faculty, students, alumni, attorneys, and members of the public, the Research Center is dedicated to research, teaching, and service. The distinctive feature of our Research Center is that its faculty proactively trains students and other faculty members to produce highly sophisticated, cost-effective legal research. For example, we offer specialized courses in efficient research relating to environmental law, economics, business and tax law, and international law. Students also have 24/7 access to one of the most comprehensive collections of legal materials, including databases, current awareness services used in law firms, and practice resources used by lawyers.

COLLEGE OF MEDICINE

GRADUATE

Dean: John P. Fogarty; **Senior Associate Dean for Academic Affairs:** Alma Little; **Associate Dean for Student Affairs and Admissions:** Robert Campbell; **Assistant Dean for Student Affairs:** Leekemase Gadson; **Assistant Dean for Admissions:** Eric Laywell; **Senior Associate Dean for Research and Graduate Programs:** Jeffrey Joyce; **Associate Dean for IMS:** Anthony Speights; **School of Physician Assistance Practice Associate Dean:** James Zedaker; **Senior Associate Dean for the Regional Medical School Campuses:** Paul McLeod (Pensacola Campus); **Assistant Deans for the Regional Medical School Campuses:** Nicole Bentze (Sarasota Campus), Luckey Dunn (Daytona Beach Campus), Juliette Lomax-Homier (Fort Pierce Campus), Joan Meek (Orlando Campus), Sandeep Rahangdale (Tallahassee Campus); **Director of Rural Health:** Kerwyn Flowers; **Director of the Clinical Learning Center:** Debra Danforth; **Director of the Medical Library:** Martin Wood; **Executive Director of Outreach and Advising:** Thesla Berne-Anderson; **Associate Dean for Faculty Development:** Gregory Turner; **Assistant Dean for Information Management:** H. Scott Dunn

The Florida State University College of Medicine is fully accredited by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association to provide a four-year program of study leading to the Doctor of Medicine (MD) degree. The MD degree is a requirement for admission to medical residency programs and is a prerequisite for taking the United States Medical Licensing Examination (USMLE) Step 3, and a prerequisite for licensure for the practice of medicine in the United States. Steps 1 and 2 of the USMLE are taken during medical school.

The mission of the College of Medicine is to educate and develop exemplary physicians who practice patient-centered health care, discover and advance knowledge, and are responsive to community needs, especially through service to elder, rural, minority, and underserved populations. The third- and fourth-year curriculum is primarily in ambulatory settings and focuses on preparing students to deliver primary care for Florida's underserved senior, rural, minority and inner-city populations. However, the Florida State University College of Medicine student selection process and the comprehensive physician training program do not exclude students interested in specialty medicine, as specialty training is a required part of the curriculum.

The Florida State University College of Medicine (FSUCOM) was created in June 2000 by a legislative act, Florida House Bill 1121/Senate Bill 1692, to serve the unique needs of the citizens of the state of Florida. The Program in Medical Sciences (PIMS), founded in 1971 as an expansion program of the University of Florida College of Medicine, is the foundation upon which The Florida State University medical school is built.

During the first two years of medical school, the basic sciences and early clinical exposure are taught at Florida State University and housed in the John E. Thrasher College of Medicine Building. Years three and four are community-based and focus on clinical training. The community-based model ensures that students receive training in a variety of practice settings including rural and inner-city hospitals, nursing homes, residency programs, clinics, and doctors' offices. Clinical training sites are located in Tallahassee, Pensacola, Orlando, Sarasota, Daytona Beach, Ft. Pierce, several Family Medicine Residency Programs, Marianna, Immokalee, and several other rural communities. Students are connected to the College of Medicine and the respective regional campuses through Internet access, videoconferencing and hand-held data units. Through these units, students can access medical information, communicate with the College of Medicine main campus, and record and evaluate their clerkship and preceptorship experiences.

The John E. Thrasher Building at the College of Medicine houses the educational program. It serves as the hub for the extensive electronic network connecting all faculty and students at several locations throughout Florida. Basic medical science and clinical training courses that utilize state-of-the-art technology and nationally recognized academicians and clinicians at The Florida State University College of Medicine and at clinical sites elsewhere in Florida have been established.

The Medical Library

The Florida State University Charlotte Edwards Maguire Medical Library was developed as a twenty-first century library with over ninety-five percent of its resources delivered in electronic format for access twenty-four hours per day, seven days per week from desktops, laptops, or PDAs anywhere the student or faculty member is located. FSU students and faculty have access to over 2,100 MEDLINE journals and other medical journals specifically selected by faculty. These subscribed journals provide access to 6.2 million

full-text articles appearing in PubMed. Approximately 400 electronic medical reference and textbooks are licensed both for the College of Medicine and the University. New and emerging evidence-based medicine Web sites and PDA products are especially suited to the electronic environment because they are continually updated and summarize the latest medical treatments and protocols. To name a few, the library licenses InfoRetriever, DynaMed, ePocrates, Clinical Evidence, ACP Pier, PepID, and the Cochrane databases. The physical facility of the Maguire Medical Library is located in the John E. Thrasher Building at the College of Medicine. The library holds a small core collection of print reference and textbooks and provides ample individual study space for students. As part of a larger university system, the students and faculty of the College of Medicine also have access to a broad range of electronic resources that support disciplines related to the medical curriculum and research interests of the college, such as psychology, health policy, aging studies, nutrition, exercise, and sports medicine. These resources include databases as well as large collections of e-books and e-journals. Overall, 48,000 electronic serial titles and approximately 400,000 e-books are available to COM students and faculty for both on-campus and remote access.

Medical students also have access to the Paul M. Dirac Library and the Robert Manning Strozier Library of Florida State University.

The Clinical Learning Center

The Clinical Learning Center, located in the John E. Thrasher Building at the College of Medicine, is a state-of-the-art teaching and assessment center that provides opportunities for medical students to learn clinical skills in a simulated clinical setting. Students learn and practice hands-on clinical skills in a supportive environment that incorporates the latest and best innovations in interactive medical technology and education. Fourteen examination rooms and two consultation rooms are equipped with audio-visual resources to record student-patient interactions for teaching and evaluation. Using standardized patients trained to portray an actual patient by simulating an illness or other physical findings, the Clinical Learning Center provides support for faculty in small group sessions to help teach students communication and physical exam skills.

The Office of Advising and Outreach

The Office of Advising and Outreach, located in the John E. Thrasher Building at the College of Medicine, provides pre-health advising and counseling to all Florida State University students who are interested in pursuing careers in the health sciences. The Advising Office sponsors sixteen pre-professional organizations that provide essential information and experiences for undergraduates interested in specific health science careers including allopathic medicine, pre-dental, pre-veterinary medicine, pre-optometry, pre-physician assistant, physical and occupational therapy, and pre-pharmacy.

Outreach Programs at the FSU College of Medicine include an in-school and after school pre-college program called Science Students Together Reaching Instructional Diversity and Excellence (SSTRIDE©) located in Leon, Madison, Gadsden, Orange, Sarasota, Collier, and Okaloosa Counties. Agreements with these school systems help provide enhanced educational experiences in the areas of science, technology, mathematics, and medicine to rural and inner-city youth. Pre-medical students, graduate students, and medical students participate in the program by providing mentorship to middle and high school students in the program. In addition, these students are provided services and opportunities through our undergraduate outreach program called USSTRIDE (Undergraduate SSTRIDE). The services include, but are not limited to, mentoring, test prep, clinical training, biweekly meetings, medical student and physician panels, health professional panels, volunteer opportunities, and study groups.

Honors Medical Scholars Program

The FSU College of Medicine, in conjunction with the FSU Honors Office, has established a program that is open annually to qualified students. The program allows eligible FSU honors students to pursue a Bachelor of Science degree of their choice while also participating in the Honors Medical Scholars Program, which includes a seminar course, mentorship program, and required pre-medical courses and experiences. Students participating in the program may be eligible for early admission to the FSU College of Medicine upon completion of pre-med requirements. Applications and program details are available from the FSU Honors Office at (850) 644-1841.

Degree Requirements

Doctor of Medicine (MD) Degree

The four-year curriculum consists of courses in the biomedical sciences, medical humanities, and social sciences; a doctoring curriculum that teaches clinical skills; preceptorships; community-based health care experiences; and clerkships in applied clinical medicine.

The pre-clerkship coursework (years one and two) takes place on the Florida State University main campus and is designed to provide students with essential basic science and general clinical information necessary for their clinical training in years three and four. Students study a core curriculum to help develop an understanding of the structure and function of the human system. The structure and function of the healthy human is studied in the first year. During the second year, emphasis is placed on microbiology, pathology, pharmacology, and general therapeutic principles for the “sick” human. The basic science and clinical instructors use a combination of small group and lecture-based instruction.

The third and fourth years are devoted to required and elective clinical clerkship rotations of two to eight weeks, most of which take place at one of the College of Medicine Regional Medical School campuses. Hospitals, physicians’ offices, neighborhood clinics, residency programs, and public health units are used as training sites in which students actively participate in the clinical setting. Up to twenty-four weeks (minimum sixteen weeks) in the fourth year are devoted to student electives in which students are able to choose among select rotations including subspecialty rotations. Twelve weeks must be spent in FSUCOM sponsored electives at any of the College of Medicine sites. The remaining twelve weeks can be spent in an elective study at any accredited medical school or approved clinical setting in the United States. In select cases, consideration may be given to limited international electives with prior approval.

The FSU College of Medicine trains students in allopathic medicine, which includes diagnosing, managing, and treating disease. The college confers upon its graduates the degree of Doctor of Medicine (MD). Upon completion of the four-year MD educational program, these physicians pursue graduate medical education (internship, residency, and sometimes fellowships), which is necessary for eventual licensure. Training in residency programs may take from three to nine additional years after completion of medical school.

To earn the MD degree a student must complete all required coursework and clerkships in years one through four, including a minimum of sixteen weeks of electives in the fourth year; complete all required surveys and evaluations; pass the USMLE Step 1, Step 2 CK, and Step 2 CS; pass an OSCE (Objective Structured Clinical Examination) at the end of the third year clerkship rotations (graduation OSCE); complete all requirements in the procedures log; remain in good standing and maintain a passing grade in each course or clerkship. Further information may be found in the online College of Medicine Student Handbook at <http://med.fsu.edu/userfiles/file/StudentHandbook.pdf>.

As part of the academic and clinical curriculum, the College of Medicine emphasizes the importance of the professional and ethical development of all medical students. The College of Medicine expects professional behavior of physicians in training in all academic activities and when interacting with patients, colleagues, faculty, and staff. Professional behavior encompasses understanding of and adherence to all aspects of the academic honor code, as well as altruism, accountability, caring, compassion, devotion to duty, the practice of excellent medical care, and respect for others. These qualities and behaviors are evaluated throughout the student’s four years at the College of Medicine. In conferring the Doctor of Medicine degree, the Florida State University College of Medicine certifies that the student is competent, knowledgeable, and possesses those personal traits essential to practicing the art and science of medicine.

Doctor of Philosophy (PhD) in Biomedical Sciences Program

The Doctor of Philosophy (PhD) in Biomedical Sciences Program is designed to prepare the next generation of health scientists for medical research and teaching in an era of increasing coordination and integration of traditional disciplines. The College of Medicine grants the PhD in Biomedical Sciences through an interdisciplinary program with the goal of training students to conduct research in the broad area of the molecular basis of human disease, including the function of the human genome in development, neurobiology, aging, cancer, and other disease. Undergraduate majors in biology, biochemistry, chemistry, microbiology, or other life sciences are suitable for graduate studies in biomedical sciences.

The curriculum for the Biomedical Sciences degree includes core courses in statistics and ethics in research, as well as specialized biomedical coursework and laboratory research. Laboratory rotation in at least two laboratories

during the first year is a degree requirement. The direction and supervision of graduate work at the doctoral level resides primarily with the major professor and supervisory committee, which is comprised of four faculty members. Research rotations during the first year allow students to make informed choices regarding the research area and major professor with whom they will conduct their PhD work. A core curriculum of the fundamentals, the choice of electives from other departments, and intellectual interaction with faculty and postdoctoral fellows encourage graduate students to mature into independent scientists.

To be considered for graduation from the FSUCOM with the PhD in Biomedical Sciences, the student must successfully complete all course requirements within five calendar years from the time the student gains admittance to candidacy by passing the preliminary exam. Other requirements for graduation include attending the Health Science Seminar Series, successfully completing the preliminary doctoral examination, submitting a doctoral research proposal approved by the major professor and the supervisory committee after admission to doctoral candidacy, registering for a minimum of twenty-four semester hours of dissertation credit, and submitting, publicly presenting, and successfully defending a dissertation.

Additional details are available at <https://med.fsu.edu/phd/home>.

Master of Science in Physician Assistant Practice (PA)

The Florida State University PA is a 27-month, 7-semester, 111 credit hour program designed to train students to practice medicine as physician assistants as part of the Physician-PA Team. Upon completion, our graduates will receive the Master of Science in Physician Assistant Practice degree. The PA Program at FSU is extremely challenging with a strong emphasis in the biomedical sciences, simulation and procedural skills. Although challenging, students will find a welcoming environment and an unrivaled network of support provided by an inter-professional team that is committed to students’ academic and professional success. Upon successful completion, students will be eligible to sit for the National Commission on Certification of Physician Assistants (NCCPA) exam.

Academic Policies

All academic policies of the College of Medicine can be found in the College of Medicine Student Handbook, which is made available online to all students who enter the college at <http://med.fsu.edu/userfiles/file/StudentHandbook.pdf>.

The four-year Florida State University College of Medicine is a full-time allopathic medical school in accordance with the standards set by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association. The minimum credit hour load requirement for each cohort is designed to ensure that medical students will complete their medical studies within a four-year period of time. The first year is a twelve-month curriculum. The second year is nine months. The third and fourth years are eleven months each. All basic science courses and clerkships are mandatory for all students.

Authorization for less than the full-time status will be granted by the Dean of the College of Medicine upon the recommendation of the Student Evaluation and Promotion Committee (SEPC) and the Associate Dean for Student Affairs. A recommendation of an extension of attendance time by the SEPC will be based on a compelling need as presented by the student.

Admission Requirements

Doctor of Medicine (MD) Program

Admission to the College of Medicine is a highly competitive process with between 1500 and 2500 applications reviewed to select the students admitted. A number of academic and personal factors are considered by the admissions office and the College of Medicine selection committee when admitting students to medical school.

The unique characteristics of medical education in the College of Medicine include clinical experiences beginning in the first year of medical school, the need for students with a high likelihood of choosing a career in primary health care, community-based clinical rotations in the third and fourth year in one of several community campuses in Florida, and a student-oriented learning environment that values teamwork and the doctor/patient relationship. The College of Medicine is searching for students who have demonstrated through their life experiences a commitment of service to others and encourages applications from traditional students, nontraditional students, and students from rural, inner city, or other medically underserved areas of the state of Florida.

To apply to the College of Medicine at Florida State University, an applicant should apply through the American Medical College Application Service (AMCAS) and should have taken the Medical College Admission

Test (MCAT). To receive the FSUCOM formal secondary application, an applicant should be a legal resident of Florida, should meet academic standards predictive of success in medical school (academic grade point average and MCAT score), and should have completed the required prerequisite courses (a listing of pre-requisite courses may be obtained by contacting the Pre-Health Professions Advising Office in the College of Medicine or on the College of Medicine Web site at <https://med.fsu.edu/outreach/pre-medical-advising-overview>). An applicant's MCAT score should be dated no more than four years prior to the beginning of the year of the application cycle. A bachelor's degree is required by the time of admission to medical school. If an applicant is currently enrolled in a degree program, the program must be completed and transcripts provided to the College of Medicine admissions office prior to the beginning of classes in late May/early June.

Doctor of Philosophy (PhD) in Biomedical Sciences Program

To apply for the Doctor of Philosophy (PhD) in Biomedical Sciences Program, students should contact the College of Medicine's Office of Research and Graduate Programs at (850) 645-6420 or check the program Web site (<https://med.fsu.edu/phd/home>) for other contact information. Admission requirements for the PhD in Biomedical Sciences Program are as follows: a prospective candidate must

1. have or be a candidate for a baccalaureate degree from an accredited college or university and be in good standing at the last institution attended,
2. have a minimum GPA of 3.0 (on a 4.0 scale), and
3. have a minimum combined verbal and quantitative score of 1000 on the Graduate Records Examination (GRE).

A GRE Subject Test is strongly recommended and may include Biochemistry and Cell Biology, General Biology, Chemistry, or Physics. Applicants whose native language is not English, and who have not received a degree from an English language institution are required to take the Test of English as a Foreign Language (TOEFL), receiving a minimum score of 80 for the Internet based (IB) test or 550 for the paper test. Special admission consideration may be requested for students with disabilities.

Applicants must also submit the required material to the University Admissions Office through their Web site at <https://admissions.fsu.edu/gradapp/>.

Master of Science in Physician Assistant Practice (PA) Program

The Florida State University PA program participates in the CASPA (Centralized Application System for Physician Assistants). To apply, all applicants must submit a completed CASPA application in addition to completing the FSU supplemental application. The CASPA application will be available May 1. The deadline for submission of the CASPA, including supplemental application questions, and payment of supplemental application fee is October 1. Applications will not be considered without the following:

1. Verified CASPA application with supplemental questions,
2. Official GRE scores, and
3. Payment of supplemental application fee.

Applicants must have a bachelor's degree from a regionally accredited college or university.

GPA: Minimum cumulative GPA 3.0 and a minimum prerequisite math and science GPA of 3.0. A candidate that has a completed graduate degree with at least 30 credit hours may submit a written request to the PA admissions coordinator to replace the undergraduate cumulative GPA with the higher graduate GPA if the cumulative graduate GPA is higher.

GRE: Applicants must submit GRE scores taken within the last 3 years. We do not accept the MCAT or other substitutes. There is no minimum score and students will be evaluated on a competitive basis. CASPA's Code is 2122.

Transcripts are not required until an official offer of admission has been made. At that time applicants must submit an OFFICIAL copy of all transcripts from each University/College attended directly to the FSU College of Medicine Admissions Office. International transfer credit is awarded for coursework completed at an accredited (recognized) institution of higher learning. No credit is awarded for technical, vocational, or below-college-level coursework, or courses completed with grades below "C." "C-" will not be accepted. An official course-by-course evaluation is required for all academic records from non-U.S. institutions. We recommend the evaluation be done by a member of the National Association of Credential Evaluation Services (<http://www.naces.org/>) or the International Education Credential Services provided by the American Association of Collegiate Registrars and Admissions Officers (<http://ies.aacrao.org/>).

English Language Proficiency: Official English Language Proficiency results are required of all international applicants whose native language is not English. The following are the minimum scores required for admission to the Physician Assistant Program: Internet based TOEFL (IBTOEFL): 88; Paper based TOEFL (TOEFL): 570; and International English Language Testing System (IELTS): 7.0. These scores are considered official only when they are sent directly to the Office of Admissions from the testing agency and are not valid after two years.

A minimum of 500 hours of direct patient care experience is required with additional experience recommended. Direct care is defined as "hands on" patient contact that involves interaction with patients. Examples of experience that qualify: nursing assistant, EMT, paramedic, nurse (LPN, RN, BSN, NP, CRNA), patient care attendant, athletic trainer, physical therapist, respiratory therapist, x-ray technician, medical assistant, military medical technician/corpsman, international medical graduates, chiropractor, licensed massage therapist, optometrist, and pharmacist. Additional examples can be found in the FAQ section of the PA program website. Examples of experiences that do not qualify for the purposes of admission to the FSU PA Program are: hours obtained by shadowing, experience obtained as student in a healthcare profession, pharmaceutical representative, lifeguard, police officer, firefighter, medical scribe, unit clerk, or medical secretary. Applicants must document experiences on the Direct Patient Care Experience Form. All hours must be completed before May 1 of the matriculation year. Experiences can be full-time, part-time, or volunteer. Applicants who do not believe they can achieve the minimum 500 hours prior to the time of application can take PA 2050, "Introduction to the PA Profession" at the FSU campus. This course is an exploration of the PA profession. It satisfies the 500-hour requirement but does not eliminate the need for some patient care experience. For more information, please see the *FAQ* section of the PA program website.

Applicants must submit at least 3 (three) letters of recommendation and no more than 5 (five). It is suggested that at least one reference should be from a healthcare provider and one should be from a science faculty member who taught the applicant. These letters should be from people who have worked with and know the applicant. References from family members or friends will not be accepted.

Citizenship: All applicants must be US citizens or Permanent Resident Aliens in possession of a "green card."

COLLEGE OF MOTION PICTURE ARTS

GRADUATE

Dean: Reb Braddock

Established in 1989, the College of Motion Picture Arts is one of only seven university-based film conservatories in the country. In the short time the College has been in operation, it has quickly become recognized nationwide as an outstanding motion picture production program, offering both a Bachelor of Fine Arts (BFA) and a Master of Fine Arts (MFA) degree to those admitted. The MFA degree offers majors in Production and Screenwriting. The College provides state-of-the-art motion picture equipment and studio facilities for production and post-production operations, and it funds all student workshops and projects, including the graduate and undergraduate thesis productions.

The expertise of the College's faculty reflects the direction and range the school will take in the future. Dean Reb Braddock is an experienced industry professional who is joined by twenty-five faculty members, all of whom are specialists in the areas of producing, writing, directing, cinematography, visual effects, animation, editing, sound recording, production design, motion picture history, theory, and aesthetics.

Faculty Distinctions

The College of Motion Picture Arts has a strong commitment to hiring experienced, working professionals who have both teaching skills and professional goals. The full-time faculty is comprised of working filmmakers with various specializations as writers, directors, producers, cinematographers, audio designers, production designers, and editors in both the theatrical and non-theatrical film and television industries, many of whom have won national and international awards and honors for their work. Some of the faculty also have strong records as research scholars and fiction writers, including visiting professors in the fields of motion picture law, business distribution, exhibition, and promotion.

Facilities

The College of Motion Picture Arts operates extensive production facilities for its graduate and undergraduate programs in *University Center A* on Florida State University's campus in Tallahassee, and in an off-campus site in Midway, Florida, known as the Torchlight Center.

Considered one of the finest facilities in the world devoted exclusively to film education, it includes: professional sound stages, a green-screen/motion capture stage, a cinematography and set operations teaching stage, grip and electric trucks fully equipped with industry standard G&E equipment, an ADR and Foley recording studio, re-recording stages, QC and dailies screening rooms, digital animation/VFX production labs, color correction suites, a 120-seat screening room, digital animation/VFX production suites, seminar rooms, writer rooms, interactive classrooms, individual post production suites, teaching labs, and student production planning rooms.

The College is equipped for and supports industry-standard acquisition in HD, 2k, 4k, and 8k digital formats, and digital sound recording formats.

Graduate Degree Program

The program leading to a Master of Fine Arts degree has the following goals: to provide the creative and technical environment for professional specialization, to ground students in the history of each medium's theory and practice, and to prepare students for careers as artists, managers, producers, and crafts persons in the professional film and video production industries. The MFA program is a full-time (Fall, Spring, and Summer), two-year course of study in motion picture screenwriting and production. Screenwriting students will complete 61 semester hours, and production students will complete 90 semester hours of coursework. The curriculum focuses on the art, craft, and business of storytelling. The graduate program is designed and scheduled as a conservatory. It is meant to create a practicum setting in which individuals can work with accomplished professionals to hone their talents, develop a body of work, and sharpen their capacities to work in teams. After required coursework, students are encouraged to complete their program of study by enrolling in the program's apprenticeship course to apply their learning in a real-world setting in the industry. This capstone experience will position students for greater chances of success in their careers.

Admission to the Graduate Program

Admission to the College of Motion Picture Arts graduate program is limited access with 24 production and eight writing students admitted each year, making admission selective and competitive. Prospective students must submit an application to and meet the requirements of the Florida State University Graduate Admissions Office, and also must submit supporting application materials as described online at: <http://film.fsu.edu/admissions>. Required supporting materials for production applicants include: a 500–1000 word statement of purpose describing their artistic work, creative influences, relevant background, and career goals; three letters of recommendation; a professional/creative résumé; a writing sample adhering to the given prompt; a creative portfolio; a video pitch; and transcripts. Screenwriting applicants must submit three samples of their written work as specified supporting materials, as well as a résumé and statement of purpose. Detailed information is available online at <http://film.fsu.edu/admissions>.

Health Insurance

Students seeking degrees in certain majors, including film, assume any exposure to the particular hazards associated with that major. As protection for our students, the College of Motion Picture Arts requires that majors present proof of health and accident insurance (name of insurer and policy number) prior to registration in the Fall semester each year. Students are expected to maintain this insurance throughout their enrollment in the program and keep the insurance information updated with the Associate Dean's Office.

Assistantships

The College of Motion Picture Arts awards a limited number of graduate assistantships each year. For more information regarding the availability of other sources of financial aid and potential scholarships, please visit the Financial Aid Web site at <https://financialaid.fsu.edu/>.

COLLEGE OF MUSIC

GRADUATE

Dean: Patricia J. Flowers; **Associate Deans:** Grady Enlow, William Fredrickson, Michael Thrasher

The graduate program of the College of Music is one of the largest and most comprehensive in the country. Accredited by the National Association of Schools of Music since 1930, it has a long and illustrious history of graduating outstanding performers, composers, scholars, administrators, educators, and therapists.

Graduate Degree Programs Offered

The following degrees are offered through the College of Music: the Master of Music (MM) degree in accompanying, choral conducting, composition, instrumental conducting, jazz studies, musicology (both historical musicology and ethnomusicology), music theory, music therapy, opera, performance, and piano pedagogy; the Master of Music Education (MME) degree; the Master of Arts (MA) degree; the Master of Arts (MA) degree in arts administration; the Doctor of Philosophy (PhD) degree in music education; the Doctor of Philosophy (PhD) degree in music (musicology and music theory); and the Doctor of Music (DM) degree in composition or in performance (bassoon, clarinet, collaborative piano, double bass, flute, guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, and voice). For more detailed information about these degree programs, consult the graduate studies office in the College of Music. All students working toward master's and doctoral degrees in music register directly in the College of Music.

Specialized Studies Programs

In addition to its degree programs, the College of Music offers a number of specialized studies programs that provide an additional area of emphasis for graduate students. These include specialized studies programs in arts administration (doctoral students only), college teaching, early music, jazz studies, music leadership, music of the Americas, organ performance, pedagogy of music theory, piano pedagogy, sacred music, and special music education. Further information about admission to, and special requirements of, these programs is available from the graduate studies office.

Music Facilities

The College of Music enjoys excellent teaching, research, and performance facilities. The two College of Music buildings are located on Copeland Street on the east side of the campus. The Kuersteiner Building, completed in 1948, is a four-story structure connected to the Wiley L. Housewright Music Building, which was completed in Spring 1979. The College of Music also occupies a number of offices in the Longmire Building. These buildings house the administrative offices; teaching studios; classrooms; band, orchestra, choral, opera, and ensemble rehearsal halls; music education and music therapy research laboratories; electronic music studios; ethnomusicology studios; early music studios; concert and recital halls; the **Warren D. Allen Music Library**; the **Center for Music Research**; and 130 practice rooms. All music facilities are structurally designed for maximum effectiveness.

Concert Facilities

The **Opperman Music Hall** is a 430-seat recital hall located in the Kuersteiner Building. The facility is used for faculty and student recitals, concerts, and lectures. The **Ernst von Dohnanyi Recital Hall**, located in the Housewright Music Building, is a 218-seat recital and lecture facility, while the 125-seat **Lindsay Recital Hall**, located in the Kuersteiner Building, is also used for recitals and lectures. The **Longmire Recital Hall** in the Longmire Building is a 120-seat facility used for recitals and lectures. Outdoor performances are scheduled during the Fall and Spring in the **Owen F. Sellers Music Amphitheatre**, while **Ruby Diamond Concert Hall** provides an impressive large concert environment for opera and major concert productions.

Music Library

The **Warren D. Allen Music Library** serves the students and faculty of the College of Music, as well as many users from other areas of the University. One of the major music libraries of the southeastern United States, the library provides a pleasant setting conducive to the efficient utilization of the extensive collection of over 200,000 scores, sound recordings, videos, books, periodicals, and microforms. Housed in 18,000 square feet of space with comfortable furnishings and excellent sound equipment, the music library provides

students with impressive resources and surroundings for the pursuit of their studies. A librarian and other library staff are on duty to assist students and faculty in their use of the library.

Opera Shops

Built in 1977–78, the **Opera Scene Shop** provides 6,000 square feet of construction space with some storage area. The building features a drafting office, elevated grid area for constructing wagons and assembling scenic flats or drops, complete hand and table tools, and a wooden “stage” area for painting drops. An opera production is built there each semester, as well as sets for opera scenes and opera majors’ projects.

The **Opera Costume Shop** is located in the Kellogg Building. Costumes are constructed or alterations are made on rental costumes each semester. In addition, costumes are constructed for various opera workshop scene programs.

Organs

A 1975, thirty-four stop Holtkamp tracker (mechanical action) organ in Opperman Music Hall is used for recitals, concerts, and lessons. Practice organs include tracker and electric action instruments by Holtkamp and Wicks. Two portable continuo organs are available for performances requiring small instruments: a 1976 four stop Holtkamp; and a 2003, three stop Bennett and Giuttari with transposing keyboard. On permanent loan from the College to St. John’s Episcopal Church, Tallahassee, a restored English chamber organ built by Hill and Davison in 1837–38, is available in the church’s Carter Chapel. Fine organs by Taylor & Boody, C. B. Fisk, and Casavant are available through longstanding arrangements with downtown churches within easy walking distance of the College. Two small organs from Juget-Sinclair Organbuilders, Montreal, were delivered in late 2013: a four stop continuo organ with transposing keyboard for use by the Choral Department and a four stop practice organ to be added to the organ practice room suite.

Assistantships

Graduate assistantships are available in most areas of study in the College of Music. Graduate assistants receive an annual stipend based upon the service rendered, the nature of the service, and the qualifications of the student. Graduate assistants also receive a waiver of both in- and out-of-state tuition. Students with assistantships will still need to pay some per-semester and some per-credit fees.

Application Requirements

Applicants for graduate music degree programs will be admitted after careful consideration of their credentials. A bachelor’s or master’s degree in music from an accredited institution is generally considered a prerequisite for admission; in cases where the undergraduate degree is not in the same area planned for graduate study, the student must demonstrate a level of achievement fully equivalent to the Bachelor of Music degree in the graduate field concerned. In addition, applicants for master’s degree programs must: 1) fulfill University-wide admission requirements; and 2) meet College of Music requirements for specific degree programs. These may include auditions, interviews, Graduate Record Examination (GRE) scores, letters of recommendation, writing samples, or the submission of composition scores. Applicants for doctoral programs may be required to pass a diagnostic examination for admission to advanced study in the field concerned, usually during the first semester in residence. Remedial coursework may also be required of a student as determined by area faculty and placement examinations.

Master of Arts (MA) Degree

This degree offers advanced graduate instruction to students and professionals for whom the MM and MME degrees are neither appropriate nor desired. The required and related course content is covered in four course areas that comprise the core of all graduate music curriculum. These courses are: Music Bibliography (MUS 5711; two credits); Applied Music or Music Ensemble (MVX 535X or MUN 5XXX; two credits); Music Theory (MUT 5XXX; three credits); and Music History (MUH 5XXX; three credits). The degree requires a culminating project, and MA Music students select either a thesis (MUS 59XX; six credits) or final project (MUS 59XX; three credits).

Master of Arts (MA) Degree in Arts Administration

This degree is offered to candidates in preparation for roles as leaders in designing, implementing, and managing arts activities. The requirements include ten semester hours in music core courses, thirteen semester hours in arts administration core courses, seven semester hours in appropriate electives, and six semester hours in an arts administration internship in music.

Master of Music (MM) in Performance

Voice

Twelve semester hours in applied music, including recital; two semester hours in ensemble; two semester hours in music bibliography; six semester hours in music history and music theory; and ten semester hours in music and/or non-music electives.

Electives must include four hours of voice/opera literature other than MUL 5620/21. MUO 5505 (Opera Workshop) may count for no more than four hours. Electives may include MUL 5620/21 (one credit each). Electives may NOT include applied music, ensemble, diction, or language.

Organ

Twelve semester hours in applied music, including recital; two semester hours in ensemble; two semester hours in music bibliography; six semester hours in music history and music theory; three semester hours in organ pedagogy; and seven semester hours in music and/or non-music electives.

Strings

Twenty semester hours in applied music, including recital; two semester hours in ensemble; two semester hours in music bibliography; six semester hours in music history and music theory; and four semester hours in music and/or non-music electives.

Harp

Sixteen semester hours in applied music, including recital; four semester hours in ensemble; two semester hours in music bibliography; six semester hours in music history and music theory; one semester hour in harp pedagogy; and four semester hours in music and/or non-music electives.

Piano

Sixteen semester hours in applied music, including recital; eight semester hours in solo piano literature; two semester hours in ensemble; two semester hours in music bibliography; and six semester hours in music history and music theory.

Accompanying

Nineteen semester hours in applied music, including recitals; six semester hours in vocal or instrumental literature; two semester hours in music bibliography; six semester hours in music history and music theory; and three semester hours in music and/or non-music electives.

Piano Pedagogy

Sixteen semester hours in applied music, including recital, practicum, and a research project; six semester hours in advanced piano pedagogy; two semester hours in keyboard literature; two semester hours in music bibliography; six semester hours in music history and theory; and two semester hours in music electives.

Woodwinds, Brass, and Percussion

Twelve semester hours in applied music, including recital; two semester hours in ensemble; six semester hours in wind pedagogy and wind literature; two semester hours in music bibliography; six semester hours in music history and music theory; and four semester hours in music or non-music electives.

Choral Conducting

Fifteen semester hours in choral literature, advanced choral techniques, choral and orchestral conducting, and choral conducting project recital; three semester hours of applied music; two semester hours in ensemble; two semester hours in music bibliography or appropriate substitute; six semester hours in music history and music theory; and four semester hours in music or non-music electives.

Instrumental Conducting

Eight to ten semester hours in wind ensemble/band or orchestral conducting and recitals; six semester hours in music literature; twelve semester hours

in music history and music theory; four semester hours in applied music; two semester hours in music bibliography or appropriate substitute; zero to one semester hours in ensemble; and two to four semester hours in music electives.

Jazz

Twenty semester hours in jazz studies, including jazz history, commercial music, contemporary media, jazz theory/arranging, jazz ensemble techniques, jazz improvisation, jazz ensembles, and jazz recital; three semester hours in college teaching in higher education; four semester hours in applied music; two semester hours in music bibliography; three semester hours in music theory; and three semester hours in music and/or non-music electives.

Master of Music (MM) in Theory

Thesis Track

Eighteen semester hours in music theory, consisting of three hours in readings in contemporary theory and analysis or three hours in history of music theory, three hours in pedagogy of music theory, three hours of contrapuntal genres or three hours in sixteenth-century counterpoint/fugue, three hours of introduction to Schenkerian analysis, and three hours of atonal analysis; three semester hours in music history; two semester hours in music bibliography; six semester hours in thesis; and five semester hours in non-theory electives. Reading proficiency in German must be demonstrated by examination. The degree will be awarded upon completion of a written and oral comprehensive examination and defense of thesis.

Non-Thesis Track

Eighteen semester hours in music theory, consisting of three hours in readings in contemporary theory and analysis or three hours in history of music theory, three hours in pedagogy of music theory, three hours of contrapuntal genres or three hours in sixteenth-century counterpoint/fugue, three hours of introduction to Schenkerian analysis, and three hours of atonal analysis; three semester hours in music history; two semester hours in music bibliography; six semester hours in composition or theory electives; five semester hours in non-theory electives; and two semester hours in other music and/or non-music electives. Reading proficiency in German must be demonstrated by examination. The degree will be awarded upon completion of a written and oral comprehensive examination and completion of all required coursework.

Master of Music (MM) in Composition

Six semester hours in composition, three semester hours in advanced orchestration; three semester hours in pedagogy of music theory; three semesters in digital music synthesis; three semester hours of music history; six semester hours in thesis; two semester hours in music bibliography; and five semester hours in a music or non-music elective. The degree will be awarded upon completion of a thirty minute chamber recital of new works, a written and oral comprehensive examination, and defense of thesis.

Master of Music (MM) in Musicology

The Master of Music degree in musicology has two emphases: historical musicology or ethnomusicology.

Historical Musicology

Two semester hours in music bibliography; three semester hours in introduction to historical musicology; three semester hours in seminar in historical musicology; nine semester hours in world music cultures and music history period courses; zero to three semester hours in ensembles; three semester hours in introduction to ethnomusicology; three semester hours in seminar in world music cultures; three semester hours in music theory; and six semester hours in thesis.

Ethnomusicology

Three semester hours in introduction to ethnomusicology; three semester hours in seminar in ethnomusicology; three semester hours in seminar in field and laboratory techniques in ethnomusicology; three semester hours in seminar in world music cultures; three semester hours in introduction to historical musicology; two semester hours in music bibliography; three semester hours in an elective anthropology course (approved by the student's advisor); six semester hours in thesis; zero to three semester hours in world music ensembles; and six semester hours of music history electives (approved by the student's advisor).

All musicology candidates will be required to develop a reading knowledge of German or French (or, for ethnomusicology only with the advisor's approval, a working knowledge in a language related to the candidate's thesis area).

Master of Music (MM) in Opera Production

Coaching Track

Sixteen semester hours in applied music; six semester hours in opera literature; three semester hours of an opera coaching project; two semester hours of music bibliography; three semester hours of music history; three semester hours of music theory; and three semester hours of electives.

Directing Track

Thirteen semester hours in opera courses, including opera production, opera directing, and opera literature; six semester hours chosen from music history, music theory, history of theater, history of art, or history of literature; two semester hours in music bibliography; three semester hours in stage/light/costume electives; three semester hours in an opera directing project; and eight semester hours in music or non-music electives.

Master of Music (MM) in Therapy

The graduate degree in music therapy requires a minimum of sixteen semester hours in music therapy and related courses in music and allows for cognate studies in fields such as psychology, sociology, criminology, and habilitative sciences. Programs are planned individually with each student, following examinations that assess training, experience, and career objectives.

Thesis Track

The Master of Music degree in music therapy may be awarded upon completion of a minimum of thirty semester hours of approved graduate coursework with an acceptable grade point average (GPA) and successful completion of a thesis and master's thesis defense.

Non-Thesis Track

The Master of Music degree in music therapy may be awarded, without a thesis, upon completion of a minimum of thirty-six semester hours of approved graduate coursework with an acceptable GPA and successful completion of graduate clinical practicum and master's comprehensive examination.

Master of Music Education (MME)

Thesis Track

Fifteen semester hours in music education, including seminar and thesis; six semester hours in music theory and music history; two semester hours in music bibliography or an appropriate substitute; two semester hours in applied music; and eleven semester hours in music and/or non-music electives.

Non-Thesis Track

A candidate for the Master of Music Education degree, with the approval of the major professor, may elect a non-thesis plan which requires a minimum of thirty-six semester hours of coursework, including the above courses (excluding the thesis) and a three hour directed individual study project under the direction of the major professor.

The Doctor of Philosophy (PhD) Degree

Music Education

Offered to candidates who pursue the course of study with distinction and who show ability to do research and scholarly study.

Seventy semester hours beyond the baccalaureate degree (forty semester hours beyond the master's degree) is the minimum requirement for graduation, excluding credit earned in dissertation. At least twenty semester hours beyond the baccalaureate degree must be in music education. Nine semester hours each must be taken in two of the following areas: musicology, theory, education, psychology, composition, performance, or related fields.

The PhD degree in music education is also available with an emphasis in music therapy. That emphasis requires seventy semester hours beyond the baccalaureate degree (forty semester hours beyond the master's degree) as the minimum requirement for graduation, excluding credit earned in dissertation. At least thirty semester hours beyond the baccalaureate degree must be in music therapy and music education. Nine semester hours each must be taken in two of the following areas: musicology, composition, theory, computers in music, education, psychology, or related fields. In addition to general admis-

sion requirements, acceptance to the program is based on 1) two years of experience beyond the master's degree as a certified/registered music therapist, and 2) a diagnostic examination assessing the applicant's ability for advanced work in the field.

Music Theory

Offered to applicants who demonstrate superior musicianship and scholarship. In addition to the admission requirements, acceptance to the program is based on: 1) a recognized Bachelor of Music degree or its equivalent, including two years of a foreign language; 2) the graduate music classification examination in music theory, music history, and applied music; and 3) a diagnostic examination which will further assess the applicant's qualifications for advanced work in the field.

A minimum of seventy semester hours beyond the baccalaureate degree (forty semester hours beyond the master's degree), excluding credit earned in dissertation, is required. This will include six semester hours in a doctoral seminar in music theory, three semester hours in advanced Schenkerian analysis, three semester hours in an advanced musicology or music education seminar, twenty-two semester hours in music or non-music electives, and six semester hours in a cognate field outside music. All requirements for the Master of Music degree in music theory are considered prerequisite to taking the doctoral diagnostic examination. Reading proficiency in a foreign language in addition to German must be demonstrated by examination. The degree will be awarded upon completion of a written and oral preliminary examination and defense of dissertation.

Musicology

Offered to applicants who demonstrate superior musicianship and scholarship. Emphases in historical musicology or ethnomusicology may be pursued within the major.

A minimum of seventy semester hours beyond the baccalaureate degree (forty semester hours beyond the master's degree), excluding credit earned in dissertation, is required. This will include twelve semester hours in advanced seminar in musicology. All requirements for the Master of Music degree in musicology are considered prerequisite to taking the doctoral diagnostic examination. A reading knowledge of French and German, or other languages pertaining to the area of specialization, is required.

The Doctor of Music (DM) Degree

Composition

Offered to candidates who have achieved distinction in composition and who demonstrate ability to do research and scholarly study.

A minimum of seventy semester hours beyond the baccalaureate degree (forty semester hours beyond the master's degree), excluding credit earned in dissertation, is required. All requirements for the Master of Music degree in composition are considered prerequisite to taking the doctoral preliminary examination.

1. Twelve semester hours in composition; six semester hours in writing skills (sixteenth-century counterpoint and fugue); two semester hours of conducting; and twenty semester hours of electives are required.
2. A public recital of chamber works and a reading or a performance of the dissertation (a major work) are required.
3. The degree will be awarded upon completion of a written and oral preliminary examination and defense of dissertation. In exception to University-wide regulations, it is not mandatory to complete the preliminary examination or to file a prospectus six months prior to graduation.

Performance

Offered to candidates who have achieved distinction in public performance and who demonstrate ability to do research and scholarly study. At least seventy semester hours beyond the baccalaureate degree, (forty semester hours beyond the master's degree) is the minimum requirement, excluding a minimum of twenty-four semester hours credit earned in recitals and research treatise.

The following are concentrations under the **Doctor of Music Degree in Performance**. For all concentrations, a minimum of seventy semester hours beyond the baccalaureate degree (forty semester hours beyond the master's degree), excluding credit earned for recitals and research treatise, is required.

Piano, Violin, Viola, Violoncello, Double Bass, or Guitar Majors

1. Thirty semester hours will be in the field of major concentration, including ensemble.
2. Of the remaining forty semester hours, one area of not fewer than six semester hours is required in music history or music theory/

composition; two semester hours in music bibliography; and thirty-two semester hours of electives, of which at least twenty-four semester hours must be in music electives.

Piano Performance Majors (Accompanying/Chamber Music Emphasis)

1. Thirty semester hours will be in the field of major concentration, including techniques of coaching for chamber music, opera, and voice; continuo playing; harpsichord; and ensemble.
2. Of the remaining forty semester hours, one area of not fewer than six semester hours is required in music history or music theory/composition; two hours in music bibliography; twelve hours in vocal and chamber music literature; and eighteen hours in electives, of which at least twelve hours must be in music electives.

Voice Performance Majors

1. Thirty semester hours will be in the field of major concentration, including recital and repertoire coaching, and ensemble.
2. Of the remaining forty semester hours, one area of not fewer than six semester hours is required in music history or music theory/composition; two semester hours in music bibliography; and thirty-two semester hours of electives, of which at least twenty-four semester hours must be in music electives.

Woodwind, Brass, or Percussion Majors

1. Thirty semester hours will be in the field of major concentration, including ensemble, and including not less than six semester hours in wind and percussion pedagogy and wind and percussion literature.
2. Of the remaining forty semester hours, one area of not fewer than six semester hours is required in music history or music theory/composition; two semester hours in music bibliography; and thirty-two semester hours of electives, of which at least twenty-four semester hours must be in music electives.

Organ

1. Thirty semester hours will be in the field of major concentration, including ensemble, continuo playing, applied harpsichord, and literature/repertoire courses.
2. Of the remaining forty semester hours, six semester hours are required in music history, music theory, and/or composition; two semester hours in music bibliography; and thirty-two semester hours of electives, of which at least twenty-four semester hours must be in music electives.

All Performance Majors

1. Performance and research requirements consist of two one-hour public recitals, one studio recital or lecture/demonstration, one performance of operatic role (voice majors only), and three chamber works (on the same or different program). Students are also required to write a research treatise on a subject related to their major field. For voice performance majors with an opera emphasis, the requirements are one public recital, two major opera roles, and one lecture recital/project. Opera emphasis students should consult with their major professor regarding the treatise or non-treatise track. For voice performance majors with a pedagogy emphasis, the requirements are one public recital, one lecture recital, one chamber works recital, an extended research treatise on a subject related to pedagogy, advanced foreign language study, and an expanded comprehensive examination which includes voice teaching. For piano performance majors with an accompanying/chamber music emphasis, the requirements are two vocal accompanying recitals, two instrumental chamber music recitals, lecture recital, and the research treatise.
2. The treatise is a formal, scholarly, written document incorporating original research conducted by the student. A prospectus should be submitted to and approved by the supervisory committee in advance (usually done at the preliminary examination). With regards to the treatise, DM students may select one of two approaches:

Option 1. The student completes an original research document consisting of a minimum of 12,000 words (not including supplementary matter such as title page, table of contents, lists of figures, bibliography and appendices).

Option 2. The student completes an original research document consisting of a minimum of 6,000 words (not including supplementary matter such as title page, table of contents, lists of figures, bibliography and appendices). In addition, the student performs an additional Lecture Recital (MV_ 6987) for 1 to 4 credits. Typically, this second lecture recital is related to the content of the written document.

Note:

- a. All treatise submission requirements of the FSU Graduate School and all University deadlines are applicable to both of the options above.
 - b. Following submission of the completed treatise to the supervisory committee, an oral defense with the committee is required. The treatise defense is normally held after completion of all recitals and submission of the treatise to the advisory committee. Students must register for MUS 8985 Treatise Defense during the semester in which the defense is conducted (normally the semester of graduation).
 - c. Guidelines for selection of music for lecture recitals are determined by each area or the supervisory committee. Guidelines may include consideration of genre and historical periods or other aspects an area might determine.
3. The preliminary examination is administered under University-wide regulations, and must be completed at least six months prior to graduation.
 4. The dissertation requirement is satisfied by registration for the recitals and the research treatise. The examination in defense of dissertation is satisfied by the examinations administered prior to recitals and by the defense of research treatise.

Examination in Defense of Dissertation and Treatise

The defense of the dissertation/treatise will be oral. Responsibility for gesturing the time, designating the place, and presiding at the examination rests with the major professor. It is recommended that students defend no later than the eighth week of classes in the semester of intent to graduate. Students must defend by no later than the Format Approval Deadline in the semester of intent to graduate. Consult the Graduate School Canvas site for more information as format approval deadlines may change somewhat depending on the year.

Academic courtesy requires that the dissertation/treatise be submitted to each member of the supervisory committee at least four weeks before the date of the oral examination. The supervisory committee, the chair of the major department, and such other members of the faculty as may be appointed by the academic dean will conduct the examination. All members of the graduate faculty are invited to attend. At least two weeks prior to the date of the examination, the student or major professor will present an announcement of the dissertation/treatise title and the date and place of the examination to the Graduate School. Consult the *Registration Guide* for the deadline dates.

All committee members and the student must attend the entire defense in real time, either by being physically present or participating via distance technology (i.e. Skype). If exceptional emergency circumstances, e.g. medical or other emergency situations, prevent the participation of a committee member then it may be necessary to arrange for an additional appropriately qualified colleague to attend the defense. A minimum of four members with Graduate Faculty Status must participate. The oral examining committee will certify in writing to the academic dean of the major department the results of the examination: passed, failed, or to be reexamined. The report of results following a reexamination must indicate the student either passed or failed. To receive a passing grade, the written dissertation/treatise must be in final form or require only minor revisions at the time of the defense. A grade of PASS for the defense of treatise or dissertation requires at least a majority approval of the committee, and the committee must sign the Doctoral Exam Form for the College of Music file. In addition, if the student passes, each member must sign the Manuscript Signature Form to substantiate the results of the defense. It is the responsibility of the major professor to submit this completed form either directly to the clearance advisor or to the appropriate college or departmental office for subsequent delivery to the clearance advisor in the Graduate School. A written critique of the conduct of the examination in defense of the dissertation/treatise should be submitted by the university representative from the graduate faculty to the College of Music academic dean and the dean of the Graduate School within one week after the date of defense. The degree cannot be awarded until both forms have been received by the Graduate School and the final version of the manuscript has been submitted to, and approved by, the clearance advisor.

The final version of the dissertation/treatise that is approved by the supervisory committee must be submitted electronically to the university manuscript clearance advisor in the Graduate School within sixty days of the defense date or the student must re-defend. A manuscript processing fee is charged.

COLLEGE OF NURSING GRADUATE

Interim Dean: Laurie Grubbs

The mission of the College of Nursing is to educate clinicians, leaders, scholars, and advanced practitioners who can enhance the quality of life for people of all cultures, economic levels, and geographic locations. The College of Nursing integrates the liberal arts and sciences with the knowledge, skills, and attitudes essential for lifelong learning, personal responsibility, and sustained achievement in the nursing professional and the communities in which our graduates reside. The Doctor of Nursing Practice (DNP) degree prepares nurses for the highest level of clinical practice in the profession of nursing as a family nurse practitioner.

Doctor of Nursing Practice (DNP)

The following program of study is offered:
Family Nurse Practitioner

Facilities

Nursing Simulation and Skills Lab

This laboratory is a suite that houses equipment and supplies for skill practice in areas such as advanced health assessment. The adult and pediatric human patient simulators provide unique opportunities to refine special skills.

Clinical Facilities

Acute care hospitals, county public health departments, indigent care clinics, private physicians' offices, health maintenance organizations, walk-in clinics, state-level health agencies, and educational facilities are used for clinical experiences. Students have input into the selection of sites for clinical experiences to meet their specific learning needs and practice interests.

Opportunities

Graduates of the DNP program are prepared to provide direct patient care services as family nurse practitioners or as leaders in health care organizations. Graduates are able to provide evidence-based models of care delivery, conduct research on the evaluation of outcomes of care, develop programs to promote population health, use technology and information to transform healthcare systems, and collaborate in inter-professional teams to improve patient and population health outcomes across continuums of care. Graduates of the role area of family nurse practitioner may apply for licensure as an Advanced Practice Registered Nurse (APRN) in the state of Florida after passing the FNP National Certification.

Scholarships/Awards

Financial assistance in the form of assistantships, scholarships, traineeships, and loans is available for qualified students through the College of Nursing or the University financial aid office.

Tuition waivers may be awarded by the graduate committee of the College of Nursing for full-time study if funds are available. Applications for financial support are considered each Fall. A variety of research and teaching assistantship funds is available each year.

Requirements

Applicants to the graduate program in nursing are expected to meet the general requirements of the University for graduate study. Established admission requirements include:

1. Baccalaureate degree in nursing from a program accredited by the National League Accrediting Commission, Inc. or Commission on Collegiate Nursing Education;
2. Competitive score on the Graduate Record Examinations (GRE) or the Miller Analogy Test (MAT);
3. A grade point average (GPA) of 3.0 (on a 4.0 scale) in upper-division coursework in the baccalaureate nursing program;
4. Current and unencumbered licensure as a registered nurse in Florida;
5. CPR Certification;
6. Three letters recommending the applicant for graduate study;
7. Written statement of professional educational goals; and
8. Personal health insurance.

Note: The Florida Board of Nursing, as well as other state and private agencies used for clinical practice, requires the disclosure of conviction records for misdemeanors and/or felonies; therefore, this information will be required at the time of application. A level II criminal background check (includes FDLE and FBI) is required and must be on file at the College of Nursing before participation in the first clinical course. The cost of the background check, drug test, immunization tracker, and fingerprint is approximately \$174.00 (may be more depending on name and address searches). This cost must be paid by the student. All required travel is at the student's expense as well.

Statement of Professional Conduct

While enrolled in the College of Nursing graduate program, the student is expected to demonstrate conduct and behavior which conforms to the Nurse Practice Act of the State of Florida, the Florida State University Student Conduct Code, Workplace Violence Guidelines, the Academic Honor Code, and all other applicable rules and policies of the University. The College of Nursing reserves the right to refuse or discontinue the enrollment of any student whose conduct or behavior is so negative, disruptive, or destructive as to compromise the work of fellow students, the effectiveness of the faculty, and/or the ability to work positively in a collaborative environment consistent with the aforementioned policies and guidelines.

Faculty members continually assess each student's professional performance. All College of Nursing graduate students are evaluated formally at the end of each semester. Any student who, in the opinion of the faculty, fails to maintain appropriate standards, will be placed on probation or dismissed from the program after receiving written notification.

Academic Performance/Academic Honor Code

College of Nursing graduate students are expected to make satisfactory academic progress consistent with the University's minimum retention standards for graduate studies. Student and faculty responsibilities for maintaining academic honesty and integrity are outlined in The Florida State University Academic Honor Code and Student Conduct Code. The College of Nursing graduate program reserves the right to refuse or discontinue the enrollment of any student who fails to maintain the academic integrity of the program as described in these codes.

Academic Requirements

A course for which a student receives a grade of unsatisfactory or below a "B" (3.0) may not count toward any graduate degree in the College of Nursing.

Students in the graduate program are required to maintain a 3.0 grade point average in all nursing coursework each semester. Failure to do so will result in the student's placement on academic probation. During the semester in which the student is on academic probation she/he is expected to improve the nursing GPA to a 3.0 or greater. The inability to meet this expectation will require that the student be dismissed from the program.

Reinstatement

In order to be reinstated into the College of Nursing graduate program after having been dismissed for academic reasons, the student is required to do the following:

1. Submit a written request for consideration of reinstatement to the Assistant Dean for Graduate Programs;
2. Provide written justification for reinstatement to the College of Nursing Graduate Admissions Committee; and
3. Upon reinstatement the student will be expected to successfully complete a prescribed plan of study in her/his first semester while achieving a semester GPA of 3.0 or greater.

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

GRADUATE

Dean: Timothy Chapin; **Associate Deans:** Robert E. Crew, Jr., Mark W. Horner, Deana Rohlinger; **Assistant Dean:** Tanya Perry

The University established Social Sciences as a separate College in 1973. The departments and programs that make up the College date from the earliest days of the University.

The College

The College of Social Sciences and Public Policy focuses upon both basic knowledge and the application of that knowledge to policy questions and public affairs. In applied policy, the College's interests center on regional, national, and international affairs, and it has a particular interest in state issues, befitting the University's location in Florida's state capital.

The College consists of the **Reubin O'D. Askew School of Public Administration and Policy**; the departments of **Economics, Geography, Political Science, Sociology**, and **Urban and Regional Planning**; the **Pepper Institute on Aging and Public Policy**; the **Center for Demography and Population Health**; the **DeVoe L. Moore Center for the Study of Critical Issues in Economic Policy and Government**; the **Leroy Collins Institute on Public Policy**; the **Florida Center for Public Management**; the **Florida Public Affairs Center**; the **Gus A. Stavros Center for the Advancement of Free Enterprise and Economic Education**; the **Center for Disaster Risk Policy**; the **Claude Pepper Center**; the **William A. Kerr Intercultural Education and Dialogue Initiative**; and interdisciplinary programs in **Asian Studies, African American Studies, Environment and Society, Public Health, Social Science, International Affairs, Law and Society, Russian and East European Studies**, and **Latin American and Caribbean Studies**.

Faculty

Many of the great scholars in the history of the University are associated with the social sciences. This tradition of faculty excellence continues. Today the social sciences provide the University with faculty members who serve as the Mildred and Claude Pepper Eminent Scholar Chair in Social Gerontology, Pepper Professor in Sociology, Daisy Parker Flory Professor, Raymond F. Bellamy Professor in Sociology, Charles Grigg Professor in Sociology, Charles Nam Professor in the Sociology of Population, Jerry Collins Eminent Scholar Chair in Public Administration, Reubin O'D. Askew Eminent Scholar Chair in Florida Government and Politics, Augustus Turnbull Professor of Public Administration, Frank Sherwood Professor of Public Administration, Rod and Hope Brim Eminent Scholar Chair in Economics, DeVoe Moore Eminent Scholar Chair in Economics, DeVoe Moore Professors in Economics, John and Hallie Quinn Eminent Scholar Chair for the Renewal of American Heritage and American Free Enterprise, Gus Stavros Eminent Scholar Chair in Economic Education, James Gapinski Professor in Economics, LeRoy Collins Eminent Scholar Chair in Civic Education, LeRoy Collins Professor in Political Science, Francis Eppes Professor in Political Science, as well as Marian Irish Professor in Political Science. Its faculty also includes numerous University teaching and advising award winners and presidents of such national bodies as The American Sociological Association, The American Society for Public Administration, The Public Choice Society, The Association of Private Enterprise Education, and The Association of Collegiate Schools of Planning. Several have won prizes in their fields both for research and service.

Programs Offered

The College offers programs leading to the master's degree in fifteen fields, the Doctor of Philosophy (PhD) degree in six fields, and numerous graduate certificates. The graduate programs in the College produce competent and up-to-date professionals for employment in the public and private sectors, as well as non-profit organizations. The College's doctoral programs prepare students for entry-level faculty positions in colleges and universities. Doctoral students in most departments of the College have opportunities for employment as teaching assistants during their programs of study.

The College offers one health-focused interdisciplinary master's degree, the Master of Public Health (MPH). MPH degree graduates will be trained principally as health administrators and health policy analysts. They will have a rich background in epidemiology, health economics, health behavior, health administration, health policy and policy analysis, and statistical and qualitative analytic skills. Careers are likely to include government agency or legislative staff positions, policy and consulting firms, think tanks, advocacy organizations and lobbying firms, international organizations focused on health and population issues, academic or media positions. For additional information see the "Public Health Programs" chapter in this *Graduate Bulletin*.

Master's Programs

Applied American Politics and Policy
Applied Economics
Applied Social Research
Asian Studies
Demography
Economics
Geography
Geographic Information Science
International Affairs
Political Science
Public Administration (Master of Public Administration)
Public Health (Master of Public Health)
Russian and East European Studies
Sociology
Urban and Regional Planning (Master of Science in Planning)

Doctoral Programs

Economics
Geography
Political Science
Public Administration and Policy
Sociology
Urban and Regional Planning

Joint Graduate Pathways

Joint graduate pathways share academic content that allows a student to expand their breadth of knowledge and content expertise to include additional domains not covered in a single degree. They are offered as follows:

- Master of Public Administration (MPA) and Master of Science in Planning (MSP)
- Master of Arts/Science (MA/MS) in International Affairs and Juris Doctor (JD) in Law
- Master of Public Administration (MPA) and Juris Doctor (JD) in Law
- Master of Science in Planning (MSP) and Juris Doctor (JD) in Law
- Master of Science in Planning (MSP) and Master of Science in Demography (MS)
- Master of Science in Planning (MSP) and Master of Public Health (MPH)
- Master of Public Administration (MPA) and Master of Science in Criminology (MS)
- Master of Public Administration (MPA) and Master of Social Work (MSW)
- Master of Arts/Science (MA/MS) in International Affairs and Master of Science in Planning (MSP)

Graduate Certificates

Graduate certificates are offered in the following disciplines:

- Application of Unmanned Aircraft Systems
- Civic and Nonprofit Leadership
- Emergency Management
- Florida City and County Management
- Public Administration and Policy
- Public Financial Management
- U.S. National Intelligence Studies

Requirements

Master's Degree

The College's minimum requirements for master's degrees are the same as the University's (see the "Graduate Degree Requirements" chapter of this

Graduate Bulletin). However, individual departments may set requirements that exceed the University minimal requirements. Entry to joint graduate pathway requires formal admission to both programs before registration for either. Refer to the individual program or department entries in this *Graduate Bulletin* for details.

Doctoral Programs

In conformity with University regulations, it is the normal expectation of the College of Social Sciences and Public Policy that the doctoral dissertation will require at least two semesters of full-time effort to prepare. Graduate students registering for dissertation hours are normally expected to register for twelve semester hours of dissertation credit for at least two semesters. Graduate students holding assistantships and registering for dissertation hours are encouraged to register for nine semester hours of dissertation credit for at least three semesters. A minimum of twenty-four semester hours of dissertation credit is required by the time of the dissertation defense, including dissertation hours taken in the semester of the defense.

All doctoral students must meet the University's scholarly engagement requirement. To meet the Scholarly Engagement requirement, doctoral students should interact with faculty and peers in ways that may include enrolling in courses; attending seminars, symposia, and conferences; engaging in collaborative study and research beyond the university campus; and utilizing the library, laboratories, and other facilities provided by the university. For program-specific ways of meeting this requirement, refer to the individual program or department entries in this *Graduate Bulletin*.

Certificate Programs

There are no college-wide requirements for graduate certificates. Each certificate has its own regulations. For details, see the relevant entry in this *Graduate Bulletin*: Reubin O'D. Askew School of Public Administration and Policy.

Assistantships and Fellowships

Most of the College's departments have large undergraduate teaching programs, and the departments, institutes, centers, and programs engage in substantial outside-funded research and contract work. Accordingly, many graduate students are appointed as teaching or research assistants. Graduate students on assistantships are normally provided with office space to carry out their duties, including meetings with students if they are teaching. Appointments to assistantships are competitive; therefore, applicants should inquire of their department or program as early as possible in the calendar year for fall appointments. Students on assistantships normally are encouraged to register for twelve semester hours of credit per semester. Assistantship appointments normally carry waivers of matriculation fees and, if required, out-of-state tuition waivers, legislative appropriations permitting. Assistantships normally carry an obligation of twenty hours of work per week, but some appointments with lower work hours are sometimes available. Assistantship stipends, which are taxable, are set by the departments or programs and vary from year to year and program to program, but generally exceed University minima and are competitive with stipends at comparable institutions.

Graduate students in the College are eligible for University fellowships and college-teaching fellowships. University fellowships carry stipends plus waivers of matriculation and out-of-state tuition fees. No duties are required of fellows. The stipends for college-teaching fellowships are made to superior candidates on a competitive basis. Applications are submitted through programs of study. The programs should be contacted for information on application procedures. Contact programs of study by December of the year prior to the academic year for which the fellowship is desired. In addition, there are a variety of fellowships and assistantships to support minority graduate students. Information and applications should be sought from intended departments or programs of study as early as possible.

COLLEGE OF SOCIAL WORK

GRADUATE

Dean: James Clark; **Associate Dean for Academic Affairs:** B. Craig Stanley;
Associate Dean for Research: TBA

The College of Social Work has a long standing tradition of excellence. Dr. Raymond F. Bellamy, professor of sociology from 1918 to 1956, first introduced social welfare content into the curriculum in 1926. Dr. Coyle Moore later became the first Dean of the School of Social Welfare which was established in 1949. By the mid-1930s, during the Great Depression, undergraduate courses in casework and group work were offered, as well as internships at the Leon County Welfare Association and the Leon County Unemployment Relief Council.

In June 1973, the social work program became identified as the School of Social Work and in 2005 it received the designation of College of Social Work, offering social work degrees at the baccalaureate, master's, and doctoral levels. The Council on Social Work Education (CSWE) initially accredited the MSW degree program in 1950. The baccalaureate program was among the first of such programs accredited by CSWE in 1974. The PhD program in social work was approved by the Florida Board of Regents in 1974 and accepted its first student in fall of that year. There are presently approximately 270 undergraduates and 750 graduate students enrolled in the College, with thirty-seven faculty members. More than thirty students are engaged in active study for the PhD in social work.

Administratively, the College is directed by a Dean and two Associate Deans. Other administrative faculty is responsible for the BSW, MSW, PhD programs, international programs, and field education. Faculty committees oversee most areas of College functioning, with student representatives on most of these committees.

U.S. World and News Report ranks Florida State University's College of Social Work amongst the top Colleges of Social Work programs in the country and the most highly ranked College in the state of Florida. We are dedicated to the preparation of the outstanding social workers of tomorrow. The College offers an up-to-date, rigorous, academic curriculum and carefully selected internships that provide students with the opportunity to put into action the conceptual and practice aspects of social work.

Educational Policy and Accreditation Standards (EPAS)

The College of Social Work adheres to accreditation standards established by the Council on Social Work Education. These standards are referred to as EPAS and were voted and put into effect December 2015 (replacing 2008 EPAS). For further details, refer to: <https://cswe.org/Accreditation/Standards-and-Policies/2015-EPAS>.

College of Social Work Mission Statement

It is the mission of the Florida State University College of Social Work to provide quality educational services at the baccalaureate, master's, and doctoral levels that prepare professional social workers to enhance human well-being and help meet the basic needs of diverse populations with particular attention to the empowerment of people who are vulnerable, oppressed, or living in poverty. The College of Social Work also has as its purpose to contribute to the knowledge base that supports social work practice and social policy development and to provide leadership through community service at the local, state, national, and international levels.

Master of Social Work (MSW) Degree Program

MSW Program Director: Fran Gomory, MSW

The curriculum at the MSW level is designed to educate professional social workers at the advanced level. Students may choose to concentrate their studies in either clinical social work or social policy and administration.

Goals of the Master's in Social Work (MSW) Program

The Master's in Social Work (MSW) program, nationally accredited by the Council on Social Work Education (CSWE), offers a broad professional education based on a systems perspective, which stresses how individuals live in their environment and how the environment affects them.

The goal of the MSW program is to educate students for advanced social work practice with diverse client systems and problems. Toward this end, the MSW program will prepare students to:

- Assess and/or diagnose and intervene with client psychosocial problems through individual, couple, family, and/or group modalities;

- Conduct autonomous empirical evaluations of their own practice interventions incorporating valid and reliable measures;
- Analyze how policies impact clinical practice;
- Critically evaluate, synthesize, and articulate empirical and conceptual literature related to an applied clinical context;
- Provide leadership in organizations and communities within the public and private sectors;
- Synthesize and apply theories and methods of policy analysis to advance social and economic justice;
- Synthesize and apply theories of change and methods of program evaluation to assess the effectiveness of social programs;
- Develop, provide, and assess effective administrative policies and practices;
- Critically evaluate, synthesize, and articulate empirical and conceptual literature related to practice in social policy, program, and administrative contexts.

Master's Program Requirements

For full-time students, the requirements for the traditional Master of Social Work degree are normally completed in two years (four semesters) beginning in August of one year and ending in May of the last year. The degree is awarded upon completion of a minimum of sixty-one semester hours, including thirty-nine semester hours of on-campus instruction and twenty-two semester hours of field instruction. Some specializations may require Summer attendance between the first and second years. A part-time option also exists and students enrolled in this program are expected to take six hours a semester. The part-time format requires nine semesters to complete.

Advanced Standing

The college offers an advanced standing program for graduates of an undergraduate social work program accredited by the Council on Social Work Education who have a grade point average (GPA) of 3.0, and who meet certain other course, field practice, and related work/volunteer experience requirements.

The advanced standing students are admitted in the Fall and Spring semesters and the program is normally completed in three semesters for full-time students and six for part-time students. This program consists of a minimum of thirty-nine semester hours including twelve semester hours of field instruction. The student chooses to specialize in either social leadership or clinical social work.

Distance Learning Programs

The MSW degree is also offered at the Panama City campus as well as online for qualified applicants. Requirements are the same as for the full-time program. All distance learning programs are offered in the part-time format only.

Admission

Admission to the traditional master's program in social work is limited to August of each year for the face-to-face programs, except for transfer and advanced standing students (see below). Application for admission to the program must be completed by May 1 of the year in which admission is planned and must be made through graduate admissions at Florida State University. Applications for face-to-face advanced standing students are to be completed by May 1 for Fall admission and by October 1 for Spring. Prospective students may apply for admission to the traditional or advanced-standing online programs for Fall, Spring, and Summer start dates. Application deadlines are May 1, October 1, and March 1 respectively.

Minimum academic standards for admission to the MSW program requires: a bachelor's degree (with a liberal arts foundation) from an accredited college or university, a GPA of at least 3.0 in upper-division courses at the undergraduate level, **and** applicants must submit scores for the Graduate Record Examinations (GRE) General test. Students who meet the following criteria may apply for a waiver of the GRE requirement: 1) Five years or more of social work experience in a traditional social work agency providing direct service delivery or macro services and a 3.0 undergraduate upper division GPA (advanced standing or traditional students) from a regionally accredited institution; 2) A completed Master's, J.D., M.D. or Ph.D. degree with a 3.0

(or better) cumulative GPA from a regionally accredited institution; 3) A 3.5 or higher undergraduate cumulative GPA from a regionally accredited institution; 4) Any earned or anticipated baccalaureate degree from Florida State University, with a 3.25 upper division GPA at time of application. Students who wish to be considered for the advanced-standing program must have earned a BSW degree from a CSWE accredited program.

University requirements for admissions must also be met. A limited number of exceptions to these requirements are available. For further information and application materials, see <http://csw.fsu.edu>.

Transfer Students

A limited number of students who have completed a full year of graduate study in an accredited College of Social Work may be admitted to the second year of graduate study. Applications should be completed before May 1 of the year in which admission is requested. Work completed more than four years before the date of admission cannot be credited toward the Master of Social Work degree.

Grade Requirements

The College of Social Work expects graduate students to maintain a “B” average in each semester of classroom work and a grade of “S” in each field education course. Continuation in the program with less than a 3.0 GPA will require the approval of the Dean of the College of Social Work. Students may not be in a field placement with an “I” or “NG” on their graduate record.

Doctor (PhD) of Social Work Degree Program

Doctoral Program Director: Stephen Tripodi, PhD

The mission of the PhD program is to develop social work scholars and leaders in research and education who use systematic methods of inquiry and reasoned argument to advance knowledge. Specific goals of the program are:

1. To offer courses and opportunities for experiential learning in systematic methods of inquiry that are sequentially integrated and foster independent capabilities.
2. To offer courses and opportunities for experiential learning in adult pedagogy that are sequentially integrated and foster independent capabilities.

Admission

Admission to the PhD program as a full- or part-time student requires 1) a master’s degree from a social-work program accredited by the Council on Social Work Education; 2) “Good Standing” status as last school attended; 3) an official Graduate Record Examination taken within previous five years; and 4) a GPA of at least 3.0 on a four-point scale.

Each candidate for admission should also have completed at least two years of successful (paid) professional experience after having earned the first professional degree in social work, whether that first professional degree is a baccalaureate degree in social work or a Master of Social Work. (In special circumstances and in limited numbers, exceptions may be made to any of these requirements in conformance with University and college policy for such exceptions.) This requirement will ensure that applicants come with an experiential base of practice upon which they can draw during the period of doctoral study. All applicants will be considered on an individual basis. An interview may be requested. Students are admitted in the Fall term of each academic year.

For further information, interested persons may request materials and application forms from the Doctoral Program Director at http://csw.fsu.edu/contact/request_doctoral_program_informa.

Doctoral Program Requirements

An individualized course of study that meets the needs and preferences of the student is prepared by the student in conjunction with faculty members. This shall include core courses required of all students. There is no foreign language requirement for the degree. Supervised practice in the content area of the student’s major substantive interests is optional.

The University’s minimum residency requirements must be met. A written and oral preliminary examination must be passed by the student prior to admission to candidacy.

Upon satisfactory completion of the required individualized course of study, including completion and successful defense of a dissertation which represents an original contribution to knowledge, the student will be awarded the degree of Doctor of Philosophy in Social Work.

Program Opportunities

The College of Social Work offers other unique opportunities that afford students the ability to focus on specialized areas of interest. With the guidance of faculty and our graduate advisor, students create a program of study, which meets their specific educational and career goals. For more information and certificate applications, visit the College’s Web site at: <http://csw.fsu.edu>.

Child Welfare Practice Certificate Program

This certificate program offers both undergraduate and graduate students an opportunity to focus their curriculum on issues related to child welfare. Coursework addresses: the prevention of neglect, abuse, exploitation, or delinquency of children; the protection of homeless, dependent, or maltreated children; the strengthening of families to maintain children in their own homes; the development of advocacy groups, and analysis of social policies and mental health issues related to this population. Child welfare practitioners provide a continuum of services in both public and private settings. For further information, visit <http://csw.fsu.edu/academics/certificate-programs/child-welfare-practice-certificate/>.

Leadership in Executive and Administrative Development in Social Work (L.E.A.D.)

The mission of this leadership certificate is to educate students about leadership theories and practices and provide students with leadership experience. Learning about leadership will give these students the skills that they will need for middle and executive positions in social service organizations. An in-depth curriculum that emphasizes leadership, decision-making, client-centered management, team building, negotiating, budget and finance, and the successful management of grants will guide our students in the direction of being able to successfully manage social service agencies. For more details, visit <http://csw.fsu.edu/academics/certificate-programs/lead-social-work-certificate/>.

Certificate in Gerontology

The mission of this certificate is to educate students about gerontological theories and practices and provide students with gerontological internship and service-learning experiences. These educational objectives will give students the skills that they need for frontline positions in practice and administrative positions in social service organizations. An in-depth curriculum that emphasizes leadership, decision-making, client-centered management, team building, negotiating, budget and finance, and the successful management of grants will guide students in successfully managing social service agencies and affecting policy and practice on all levels.

Joint JD/MSW Pathway

This program is for students interested in combining an MSW with a degree in law. Persons graduating with this dual degree go into areas such as family law, child advocacy, domestic violence, public policy, and public defense. Students interested in this joint graduate pathway must be admitted simultaneously and independently to both FSU’s College of Social Work and College of Law.

Joint MSW/MBA Pathway

This curriculum is structured for graduate students enrolled in the Social Policy and Administration (SPA) concentration in the Advanced Standing MSW program and for students pursuing an MBA. The mission of this joint graduate pathway is to unite the strengths of both these degree programs and to educate students about leadership theories and practices, while also providing students with leadership experience from business and social-work perspectives. Mastering these skills will give these students the backgrounds that they will need for middle and executive positions in social-service organizations.

Joint MSW/MPA Pathway

Florida State University’s Reuben O’D. Askew School of Public Administration and Policy and the College of Social Work offer a Joint Graduate Pathway leading to the degree of Master of Social Work (MSW) and Master of Public Administration (MPA). This is one of the few Joint Graduate Pathways in these fields offered in the U.S. This program prepares students for positions in public, private and nonprofit human service organizations by gaining knowledge in social work and public administration. Students must be admitted to both graduate programs independently.

Joint MSW/MS in Criminology and Criminal Justice

The MSW/MS is a collaboration between the College of Social Work and the College of Criminology and Criminal Justice. The joint graduate pathway is for graduate students in both programs who wish to expand their under-

standing of the connection between these two fields of study and gain expertise through work with forensic clients. Students must be admitted to both graduate programs independently.

Field Education

Director of Campus-Based Field Education: Katrina Boone, MSW; **Director of Online Field Education:** Rosalyn Deckerhoff, MSW

The purpose of field education is to provide students with a structured learning opportunity for development and reinforcement of appropriate levels of competence in the field of social work. Field education allows students to apply knowledge, values, and skills learned in the classroom to social work practice settings. As students undertake learning tasks within the reality of agency life, a vehicle is established whereby knowledge and theories can be applied, attitudes and values examined, and skills developed and refined.

The field education component of the College of Social Work is designed to ensure that each student completes a high quality educational experience in a supervised agency placement. This learning experience is designed to enhance a student's ability to integrate theory into effective evidence-based social work practice, broaden the range of skills for performing social work functions, and strengthen awareness of attitudes, motivations, and judgments identified with the profession of social work. The Office of Field Education selects field placements based on the potential for providing the range and depth of learning experiences necessary to achieve the educational objectives established for those students. Agencies affiliating with the College of Social Work represent the diversity found in social services throughout our community. The College offers a wide array of internships in both public and private agencies, and with diverse populations of clients so that students will be provided opportunities for exposure to a wide range of social work roles and learning tasks.

Overseas Study

International Program Director: Neil Abell, PhD

Florida State University offers students the opportunity to study abroad and to gain valuable experience through international internships, study abroad classes, student exchanges, and Spring break service programs. For information concerning eligibility, fees, and other details of these programs, contact the College's Director of International Programs. Social work majors are encouraged to consider these opportunities for study overseas.

Professional Development

Professional Development Director: Pamela Graham MacDill, MSW

The Professional Development program at the College of Social Work is committed to life-long learning for social work practitioners. The goal of continuing education is to provide a continuum of instruction to professionals as an integral part of curriculum and practice.

Outstanding workshops and seminars are presented at the request of professionals, private and public agencies, and members of the College of Social Work.

The Professional Development program is an authorized provider through the Florida Department of Professional Regulation of continuing education units (CEUs). CEUs are awarded to all participants who successfully complete any continuing education presentation.

Student Organizations

The **Student Association of Social Workers (SASW)** is an organization of and for social work students. It is open to undergraduates as well as graduates and participation by all is welcome. The association is a good vehicle for socialization to the profession. It can be used as a channel for handling complaints and is an excellent way for students to get to know one another.

The **Doctoral Student Organization (DSO)** is an Official FSU student organization. Membership is awarded when students are admitted to the doctoral program. The DSO provides service to the College and community, selects a representative to participate in Doctoral Program Committee meetings, and advocates for the needs of students.

The **Phi Alpha Honor Society** serves as a means of recognizing outstanding academic students. The society involves itself in fundraising and community service.

The **Sigma Phi Omega** is an academic honor and professional society in gerontology. It recognizes excellence of those who study gerontology and aging and the outstanding service of professionals who work on behalf of older persons.

College of Social Work Scholarships

Instructions on applying for scholarships are made available in December each year from the College (phone 850-644-4751 or 1-800-378-9550).

Applications are accepted January through March 1. Awards are for Fall semester only, except as noted (see Hurrle and Montgomery Scholarships). Deadline dates and applications are available on the College of Social Work Web site, at <http://csw.fsu.edu/academics/financial-assistance/>.

Citrus Health Network Scholarship

Established in 2002, this scholarship serves as a lasting tribute to the community services provided by Citrus Health Network, Inc. It is awarded annually to graduate students who are interested in working in the behavioral healthcare field in the Miami-Dade County area.

Mark DeGraff and Lula Hamilton DeGraff Scholarship

This award, first presented in 1985, is given to a senior undergraduate or graduate student who intends to conduct research on factors influencing the growth and development of youth, or who intends to work professionally with youth.

Joanna F. Gorman Scholarship

This scholarship was established to honor Dr. Gorman who had a deep commitment to the profession's development and a clear vision of social work's mission to create a more just society. Full-time social work students receiving this award show evidence of outstanding academic achievement, exemplify the highest standards of character and plan to work for one year in the area of child welfare, health, or mental health.

Herndon Scholars Program

The Herndon Scholars Program, sponsored by the Helios Education Foundation, is an endowed fund that was created in 2007 and first presented in fall 2008. It provides annual scholarships to graduate students in the FSU College of Social Work. Recipients of the award must be Florida residents. Preference is given to students who have social work practice experience prior to graduate school.

Walter W. Hudson Doctorial Scholarship

This scholarship honors Dr. Walter Hudson, a former faculty member who was named the first recipient of the prestigious Lifetime Achievement Award from the Society of Social Work and Research in 1999. Dr. Hudson was an international leader in measurement theory, development and testing of assessment and outcome evaluation tools, statistics, evidence-based practice methodology, and computer applications for practice. This award is intended for a PhD student at the College of Social Work.

Margaret H. Jacks Scholarship in Aging

Ms. Jacks was a formidable and outspoken advocate for elderly Floridians for more than five decades. This award is directed to graduate students studying gerontology. Recipients must have completed one course on aging or demonstrated a commitment to the field of aging through volunteer or work experiences.

Richard M. King Scholarship in Social Work and Business Administration

This endowed scholarship was established by alumnus Richard King (MSW '69) to encourage graduate students who demonstrate interest in earning both an MSW and a Master's in Business Administration (MBA). Social work students who take electives in the College of Business are also eligible for the award.

James and Mary Koalska Undergraduate Scholarship

This memorial scholarship fund was set up by Professors Paul and Betty Piccard in memory of Betty's parents, James Koalska and Mary Brennan Koalska. The Koalskas were the children of Irish and Polish immigrants and entered the work force at a very young age. While they could not benefit from a college education themselves, they valued education and provided their daughters with opportunities in higher education – one in nursing, the other in social work. This award is intended to cover tuition for a social work undergraduate student whose parents did not attend college.

Joyce Harper Laidlaw Scholarship in Child Welfare

The Laidlaw Scholarship, established by FSU alumna Joyce Harper Laidlaw and her husband Don, was first presented in 2003. It is for graduate students who have decided to focus their studies on child welfare.

M. Sharon Maxwell Ferguson Scholarship in Family Violence

Dr. Maxwell retired in 2006, after serving nearly two decades on the faculty of CSW and establishing the Institute for Family Violence Studies (IFVS). She is a nationally recognized expert in intimate partner violence and a champion of community-based services for survivors and their children. This scholarship is designed to encourage undergraduates to work with the IFVS and explore career opportunities designed to help end family violence.

C. Aaron McNeece Field Education Scholarship

Separate application required. Applications are available online and in the CSW field office, 2510 UCC. The deadline is March 1. For information, contact Katrina Boone at kboone@fsu.edu or call (850) 644-4860 or 1 (888) 232-6416 (toll-free). Dr. McNeece retired in 2008 after serving on the CSW faculty for thirty years. He is internationally recognized for his work in chemical dependency and treatment for criminal offenders. He held various leadership positions at the College of Social Work and served as Dean from 2004 to 2008. This scholarship named in his honor was established by the CSW Field Advisory Committee to provide assistance to graduate and undergraduate students during their internships.

Coyle and Mabel Moore Scholarship

Dr. Coyle Moore came to Tallahassee in 1928 to develop a course of instruction in social work at the Florida State College for Women (FSCW). When FSCW became a University in 1947, Dr. Moore was appointed dean of the School of Social Welfare. Mrs. Moore, who had a degree in social work from the University of North Carolina, was an active advocate of community service. This award, created in honor of Dr. and Mrs. Moore, supports full-time undergraduate and graduate students who demonstrate a commitment to the social work profession through strong character and service.

Sarah Sealey Morrill Scholarship

Mrs. Morrill graduated from the FSU School of Social Work in 1955 and was a pioneering activist who planned and established counseling and guidance services for children in Leon County. Later, she assumed leadership roles in planning and managing programs for the elderly. This scholarship serves as a tribute to Sarah Sealey Morrill's life-long commitment to community mental health services and is for undergraduate and graduate students specializing in community mental health.

MSW Class of '75 March Graduates Scholarship

The idea for this scholarship arose during a class reunion in March 2000, as attendees were sharing stories about their lives and they realized that FSU has had a defining influence on their successes. They created this award for full-time MSW students who are interested in community-based practice, advocacy, or public policy, with a demonstrated commitment to social justice concerns.

Bernhard Scher Undergraduate Scholarship

This scholarship, first presented in 1978, was established by the family of Dr. Scher. He served as dean of the School of Social Work from 1968–1973 and was a member of the faculty until his death five years later. The undergraduate recipient of this award demonstrates a strong commitment to social work values through actions and words.

Guy and Delores Spearman Scholarship

This scholarship was created by 1975 MSW Alumnus Guy Spearman and his wife to support exemplary undergraduate and graduate social work students who come to FSU from Brevard County, Florida. Mr. Spearman is well known as a legislative lobbyist and an enthusiastic supporter of FSU.

John P. and Jane W. Wakeman Memorial Scholarship for Arts in Social Work

This endowed scholarship has been established by Mary Wakeman in honor of her parents. It is for undergraduate or graduate students in the College of Social Work with an expressed interest in the study and practice of the arts in social work.

Victoria E. Warner Scholarship

This award was established to honor Dr. Victoria Warner, a long-time faculty member and chair of the Department of Social Work at Florida A & M University in Tallahassee. The scholarship is awarded to an MSW student who received a bachelor's degree from FAMU and intends to pursue a career working within the African-American community.

Patricia Vance Scholarship

Ms. Patricia V. Vance, MSW, "Pat" was the Associate Dean and served on faculty from 1966 to 1986 for the College of Social Work. Pat provided her gentle and thoughtful counsel with a tremendous level of support for students and other faculty members. She worked unstintingly to promote the profession of social work through her service and teaching. When she retired in 1986, she and her husband, Dr. Maurice Vance, established a scholarship for social work students to support their education. Upon Professor Kim Maddox's retirement it is her wish to have this scholarship endowed.

Cheryl Roland Endowed Scholarship

This endowed scholarship was established by Cherie Roland, an alumna and a strong advocate for women. The award goes to a student with interest in women's studies and had the first recipient in 2013.

Dianne F. Harrison Scholarship

Created to honor former PhD Program Director and Dean, Dr. Harrison, this is a competitive award given to doctoral students with the best dissertation prospectus.

Lamar F. Everett Scholarship

This scholarship was established in 2009 as the result of a bequest from Mr. Everett's estate. The award is specifically earmarked to benefit economically disadvantaged and academically worthy undergraduate or graduate College of Social Work students.

Mary DiNitto Endowed Scholarship

Dr. Diana DiNitto established the Mary DiNitto Endowed Scholarship in honor of her mother's 90th birthday. This generous gift will provide support to students in the College of Social Work with strong interests in the profession and creative ideas for practice broadly defined. Preference will be given to students who exhibit financial need. An alumna and former faculty member of the College, Dr. DiNitto is the Cullen Trust Centennial Professor in Alcohol Studies and Education and Distinguished Teaching Professor at the University of Texas at Austin School of Social Work.

Violet Crook Scholarship

Opened in 2006 after Wendy Crook, a professor in the College of Social Work, created an endowment to support doctoral students in the college. Sadly, Dr. Crook passed away in 2007 prior to the pledge being fulfilled. At the passing of her mother in 2012, the scholarship was fulfilled to honor Wendy and her love for the college and social work.

John and Meg Paschal International Scholarship

The John and Meg Paschal Scholarship was created to provide support to Social Work students demonstrating integrity and passion for the profession, particularly in international settings, along with academic excellence and financial need.

Social Work Veterans Scholarship

This scholarship was created by 1975 MSW alumnus and veteran Guy Spearman and his wife Delores Spearman to support the military and the College of Social Work. The award is given to a post-graduate (current MSW or PhD) who was in the military, currently serving in the military, or who will be serving in the military after graduation.

Bill and Nolia Brandt Scholarship

Awarded to undergraduate or graduate students who are in good standing, are of high moral character, and have financial need. Students pursuing a dual MSW/MBA degree or the LEAD certificate are encouraged to apply.

Gomory Family Scholarship

Faculty members Dr. Tomi Gomory and Ms. Fran Gomory, MSW have created the Gomory Family Scholarship to be awarded to a student in the College of Social Work program that is an approved intern at the Leon County Homeless Shelter.

Christopher D. Hefren Child Welfare Endowed Doctoral Scholarship - Fund #8285

This scholarship will provide needed support to doctoral candidates whose primary research focus is in child welfare. The fund will serve as a lasting tribute to donor Judy Hefren's son Christopher.

GRADUATE ACADEMIC DEPARTMENTS AND PROGRAMS

Graduate Department of ACCOUNTING

COLLEGE OF BUSINESS

Website: <https://business.fsu.edu/departments/accounting/>

Chair: Rick Morton; **Andersen Professor:** Fennema; **Deloitte Professor:** Paterson; **EY Professor:** Morton; **KPMG Professor:** Billings; **Denise Dickins Accounting Faculty Fellow:** Blay; **William Hillison Associate Professor:** Bozanic; **Professors:** Billings, Fennema, Morton, Paterson; **Associate Professors:** Bathke, Blay, Bozanic, Gerard, Reynolds, Zhang; **Assistant Professors:** Ehinger, Keskek, Mauler, Newton, Pierce, Romney, Zimmerman; **Senior Lecturers:** Greenberg, Sudano; **Teaching Faculty I:** Adams, Polinski, Wadlinger, Woodward

The Department of Accounting offers two graduate degree programs: the Master of Accounting (MAcc) and the Doctor of Philosophy in Business (PhD) with a concentration in accounting. Many Master of Accounting alumni hold important positions in major accounting firms, consulting, industry, government, and nonprofit organizations. Doctoral graduates are faculty members at some of the nation's leading universities.

The accounting faculty is recognized nationally for excellence in teaching and research. Faculty members have expertise in a wide variety of areas including financial accounting and reporting, managerial accounting, governmental accounting, accounting information systems, assurance services, and taxation.

The department maintains close relationships with alumni and the accounting profession. These relationships provide students the opportunity to interact with professionals and to become more familiar with the accounting environment in business. The external support of alumni and friends of the accounting program provides for many enhancements of the learning environment, which result in Florida State University maintaining one of the leading accounting programs in the country.

Students and faculty in accounting have access to state-of-the-art facilities and materials for learning and research. Up-to-date technology, excellent library materials, and a wide range of research databases are available. Ongoing research in the department covers a wide range of activities, including empirical analyses of financial reporting issues, the examination of behavioral issues in accounting and auditing, and the study of current issues in accounting systems, assurance services, and taxation.

Master of Accounting

The Master of Accounting (MAcc) program provides students with exposure to advanced theories and analytical tools used in the field of accounting. It provides an opportunity both to pursue specialized interests and to acquire a broader knowledge of the accounting discipline in general. Completion of the program prepares students for professional accounting careers and fulfills the educational requirements to become a Certified Public Accountant in the State of Florida and many other jurisdictions. Demand for MAcc graduates has been strong in the past and is expected to continue to be strong in the foreseeable future.

Students in the MAcc program choose a major from three offerings: Assurance and Advisory Services, Generalist, or Taxation. Each major requires between six and eight graduate courses in accounting, as well as courses in other business areas, for a total of thirty semester hours. Each major area includes courses specifically designed for that area. The MAcc program is structured as a full-time, day-time program; however, students may attend on a part-time basis under certain circumstances. Full-time students who have met all prerequisites complete the program in one calendar year. New students may enter the program at the beginning of any term.

A number of fellowships, scholarships, and teaching/research assistantships are awarded by the Department of Accounting to applicants with strong academic credentials.

Applications to the MAcc program are considered for anyone with an undergraduate degree in accounting. Other undergraduate majors are also considered for admission, but are advised to consult the Master of Accounting Program for non-accounting majors section below. Admission decisions are made by an admissions committee after considering all relevant information. Applicants are required to submit official transcripts of prior coursework, an acceptable score on the Graduate Management Admissions Test (GMAT), letters of recommendation, a résumé and a personal statement. Successful ap-

plicants usually have a GMAT score of 550 or better and a grade point average (GPA) of 3.0 or better in upper-division accounting courses. The GMAT is a university requirement that may be waived if an applicant meets certain criteria. The department also offers a combined BS/MAcc pathway that allows highly qualified FSU undergraduate students the opportunity to accelerate their coursework and take up to nine semester hours of graduate coursework, which may be counted toward both the BS and MAcc degrees. More information is in the Combined BS/MAcc Pathway section below.

Requirements

Specific course requirements in the Master of Accounting program are under continuous review. For current course requirements, contact *Graduate Office, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110*, or email gradprograms@business.fsu.edu.

Combined Bachelor of Science in Accounting/Master of Accounting Pathway (BS/MAcc)

Florida State University students majoring in accounting can opt for the combined bachelor's/master's pathway that allows them to streamline their studies. Students must meet the following criteria: an overall GPA of at least 3.4, an upper-division GPA of at least 3.2, and an upper-division accounting GPA of at least 3.2 based on at least four upper-division accounting courses. Eligible students apply for the combined pathway by the end of the second semester of their junior year. Admitted students are then able to register for up to nine semester hours of graduate courses that count towards both the BS and MAcc degrees during their senior year. Students admitted to the combined BS/MAcc pathway will still be required to apply separately to the Master of Accounting (MAcc) program.

Master of Accounting Program for Non-Accounting Majors

The Department of Accounting also offers a MAcc program for non-accounting undergraduate majors. The first part of the program consists of undergraduate foundation courses. The second part of the program consists of the MAcc coursework described above. Students in the program must maintain at least a 3.0 GPA. The foundation courses can also be completed as a non-degree seeking student or a second degree-seeking student, prior to admission to the MAcc program.

Required Undergraduate Foundation Courses

Accounting Information Systems
Auditing Theory and Application I
Business Communications
Calculus for Business and the Nonphysical Sciences
Cost Accounting
Federal Tax Accounting I
Financial Accounting and Reporting I
Financial Accounting and Reporting II
Financial Management of the Firm
Fundamentals of Business Statistics
Introduction to Business Analytics
Introduction to Financial Accounting
Introduction to Managerial Accounting
Principles of Macroeconomics
Principles of Microeconomics
Quantitative Methods for Business Decisions
Spreadsheets for Business

Doctor of Philosophy in Business

Major in Accounting

The Doctor of Philosophy in Business with a major in accounting prepares candidates primarily for research and teaching careers at major academic institutions. The curriculum is tailored to the educational objectives of each candidate, enabling specialization within the field of accounting as well as the selection of a support area of study. The doctoral primary area in accounting

assumes coursework equivalent to the University's master of accounting program. However, it is possible for exceptional students to be admitted directly into the doctoral program without prior graduate work.

The University offers several supplementary fellowship awards to doctoral students that are in addition to the standard financial assistance provided by the College of Business. All applicants and continuing students are considered automatically for these awards. Additionally, current doctoral students have been successful in winning nationally competitive fellowships from international accounting firms, the McKnight Foundation, the PhD Project, the American Accounting Association, and the American Institute of Certified Public Accountants.

Requirements

Foundation Courses

It is recommended that all Accounting doctoral students satisfy the following prerequisites:

Graduate level course in:

Finance

Undergraduate level courses in:

Calculus I

Calculus II

Linear Algebra

Statistics

The above requirements may be satisfied by equivalent coursework taken elsewhere.

Primary Area Coursework

The following doctoral seminars and courses are required in the primary area in accounting:

ACG 6835 Seminar in Behavioral Accounting Research (3)

ACG 6885 Introduction to Accounting Research (3)

ACG 6896 Seminar in Capital Market-Based Accounting Research (3)

ACG 6916 Supervised Research (3)

ACG 6939 Seminar in Accounting (3)

Additional topics may be pursued through directed individual studies with members of the accounting faculty. In addition to these regularly scheduled seminars, the accounting research colloquium meets weekly to share the results of recent research conducted by University faculty, doctoral students, and invited scholars from other universities.

Support Area Courses

For the support area, three or four courses and/or seminars are selected by the candidate in consultation with the primary area advisor. The support area may be chosen from an area either within or outside the College of Business. The nature of research in accounting is increasingly interdisciplinary, drawing on tools and concepts from economics, mathematics, statistics, finance, psychology, and other disciplines. These fields represent common areas in which recent doctoral students have chosen to take their support area coursework.

For additional information related to graduate accounting programs, contact the Graduate Office, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110, or via e-mail at gradprograms@business.fsu.edu.

Definition of Prefixes

ACG—Accounting: General

BUL—Business Law

GEB—General Business

TAX—Taxation

Graduate Courses

Note: The 5000-level courses are reserved exclusively for graduate students. Courses that may be repeated for credit are designated by “r” immediately following the course number.

ACG 5026. Financial Reporting and Managerial Control (3). Prerequisite: ACG 2021. This course provides a basic understanding of accounting systems and financial statements as a foundation for analysis. The course also addresses cost systems and controls as they pertain to organizational control. Cannot be taken for credit for the Master of Accounting degree.

ACG 5065. Fundamentals of Accounting and Finance (3). This course is an introduction to accounting and finance for non-College of Business majors. Course topics include financial accounting, tax accounting, managerial or cost accounting, auditing, and corporate finance. Cannot be applied for credit for any graduate business degree.

ACG 5135. Financial Accounting Theory and Standard Setting (3). Prerequisite: ACG 4201. This course is an introduction to the development of financial accounting theory, the relationship of accounting theory and research to standard setting, and discussion of the current standard setting environment.

ACG 5175. Financial Statement Analysis (3). Prerequisite: ACG 4201. This course teaches students to compare profitability and risk of business entities; aid in assessment of the efficiency of a business entity's operations and success of its strategies, and help predict a business entity's future profitability and financial health.

ACG 5216. Advanced Accounting (3). Prerequisite: ACG 3111 with a grade of C– or better. This course provides a study of accounting principles and problems related to advanced accounting topics.

ACG 5356. Advanced Management Accounting (3). Prerequisite: ACG 3341. This course is a study of current advanced topics in management accounting.

ACG 5405. Advanced Accounting Information Systems (3). Prerequisite: ACG 4401. This course explores the design and operation of accounting systems as well as the relevance of data processing and statistical methods to the system of financial information and control.

ACG 5458. Emerging Technologies in Accounting and Auditing (3). This course is designed for Master of Accounting students with either an assurance services major or an accounting information systems major. The course furnishes students with knowledge and skills to account for and to audit firms that are using emerging technologies. It provides students with tools to identify and assess the risks of insecure electronic commerce systems and to formulate security-conscious solutions.

ACG 5466. Enterprise Systems and Accounting (3). This course is designed for Master of Accounting students who are specializing in accounting information systems, assurance services, or corporate accounting. The course furnishes students with the knowledge and skills to implement, use and audit enterprise-wide information systems. Students are expected to enter the course with an understanding of databases, as the database is the most crucial component of an enterprise-wide information system.

ACG 5505. Government and Not-for-Profit Accounting and Auditing (3). Prerequisite: ACG 4201. This course is an introduction to financial reporting and auditing requirements for government and not-for-profit entities.

ACG 5635. Auditing Theory and Application II (3). Prerequisite: ACG 4632. This course explores the theory of auditing and development of audit programs and procedures for obtaining audit evidence as well as the responsibilities of auditors according to the requirements of Securities and Exchange Commission.

ACG 5685. Forensic Accounting (3). Prerequisite: ACG 4632 or equivalent. This course provides in-depth exposure to the forensic accounting process and related audit topics, including identification of fraud risk factors and development of skills in detecting fraud.

ACG 5695. Challenges in Professional Accounting (3). Pre- or corequisite: ACG 4642 or ACG 5635. This course examines case studies emphasizing elements of public practice, standards of professional conduct, fraud issues, systematic controls, auditing principles and standards, and communication of findings.

ACG 5905r. Directed Individual Study (1–3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of three semester hours within the same term.

ACG 5906r. Special Studies in Management (1–3). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of three semester hours.

ACG 5915r. Supervised Research (1–3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. A maximum of three hours may apply toward the master's degree. May be repeated to a maximum of five semester hours. For master's candidates only.

ACG 5935r. Special Topics in Accounting (1–3). Prerequisite: Instructor permission. In this course, content varies to provide opportunities to study current issues in accounting and topics not offered in other courses. May be repeated to a maximum of six semester hours.

ACG 5945r. Supervised Teaching (1–3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. A maximum of three hours may apply toward the master's degree. May be repeated to a maximum of five semester hours.

BUL 5335. Law for Accountancy (3). This course exposes students to the basic concepts of law as applied to the accounting profession. The focus is on the application and analysis of legal and ethical principles.

GEB 5086r. Professional Development (1–3). (S/U grade only.) This course familiarizes students with various aspects of successful career preparation and position acquisition, as well as crucial team participation skills and an understanding of workplace dynamics.

GEB 5907r. Special Studies in Business (1–3). May be repeated to a maximum of three semester hours.

TAX 5005. Taxes and Business Strategy (3). Prerequisite: TAX 4011. This course provides a framework for understanding how taxes affect decision-making, asset prices, equilibrium returns, and the financial and operational structure of firms.

TAX 5015. Federal Income Tax Accounting II (3). Prerequisite: TAX 4001. This course explores concepts and methods of determining income of corporations, partnerships, estates, and trusts for tax purposes as well as interpretation of Internal Revenue Code, related regulations, and tax advisory services.

TAX 5065. Research in Federal Taxation (3). Prerequisite: TAX 4001. This course is a critical examination of the legal aspects of taxation and the development of federal tax law as a basis for planning business decisions.

TAX 5105. Seminar in Corporate Income Taxation (3). Prerequisite: TAX 4001. This course allows students to develop comprehensive knowledge of corporate income taxation concepts, problems, and authorities.

TAX 5205. Pass-Through Entities and Fiduciaries (3). Prerequisite: TAX 4001. This course includes in-depth coverage of the U.S. federal income taxation of pass-through entities including partnerships, Subchapter S corporations, trusts, and estates.

TAX 5405. Seminar in Federal Taxation of Estates and Gifts (3). Prerequisite: TAX 4001. This course allows students to develop a comprehensive mastery of concepts, problems, and authorities related to federal estate and gift taxation.

TAX 5527. Multijurisdictional Tax Issues (3). Prerequisite: TAX 4001. This course provides an in-depth examination of multijurisdictional tax issues including U.S. federal income taxation of inbound and outbound transactions, state and local taxation, and multijurisdictional tax policy issues.

TAX 5875r. Special Topics in Taxation (1-3). Prerequisite: Instructor permission. In this course, content varies to provide an opportunity to study technical topics in taxation not offered in other courses. May be repeated to a maximum of six semester hours.

Doctoral

Note: The doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level. In exceptional cases master's candidates may elect 6000-level courses with permission of the instructor and the associate programs.

ACG 6696. Seminar in Financial and Auditing Research (3). Prerequisite: Instructor permission. This course offers an introduction to the academic literature in financial accounting and auditing research.

ACG 6835. Seminar in Behavioral Accounting Research (3). Prerequisite: Instructor permission. This course is a survey of economic-based and psychology-based experimental research as it relates to accounting and auditing.

ACG 6885. Introduction to Accounting Research (3). Prerequisite: Instructor permission. This course offers a survey of subject areas studied and research methods applied in accounting.

ACG 6896. Seminar in Capital Market-Based Accounting Research (3). Prerequisite: Instructor permission. This course offers a review and analysis of extant accounting research in the capital markets area.

ACG 6916r. Supervised Research (1-5). (S/U grade only). Prerequisite: Consent of associate dean for graduate programs. May be repeated to a maximum of five semester hours.

ACG 6939r. Seminar in Accounting (3). This course covers research methodologies useful in developing and evaluating accounting theories and principles; an introduction to behavioral accounting research and empirical financial accounting research. May be repeated to a maximum of twelve semester hours.

ACG 6946r. Supervised Teaching (1-3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five semester hours.

ACG 6980r. Dissertation (1-12). (S/U grade only). A minimum of twenty-four semester hours is required.

ACG 8964. Doctoral Preliminary Examination (0). (P/F grade only.)

ACG 8985. Dissertation Defense Examination (0). (P/F grade only.)

GEB 6904r. Readings For Examination (1-12). (S/U grade only). This course is designed for PhD students who have completed all of their required coursework and are preparing to sit for their preliminary examinations in the current semester. May be repeated to a maximum of twenty-four semester hours.

ADULT EDUCATION:
see Educational Leadership and Policy Studies

ADVERTISING:
see Communication

AFRICAN HISTORY:
see General Bulletin; History

AFRO-AMERICAN STUDIES:
see General Bulletin

Graduate Department of ANTHROPOLOGY

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.anthro.fsu.edu/>

Chair: Marrinan; **Professor:** Falk; **Associate Professors:** Marrinan, Peres, Peters; **Assistant Professors:** Halligan, Leppard, Mehta; **Specialized Faculty:** Kowal, Thomas; **Professors Emeriti:** Doran, Pohl; **Courtesy Professors:** Hellweg, Joos, Pullen

The Department of Anthropology offers graduate education for students with an interest in archaeology, physical anthropology, and cultural anthropology. Faculty members are concentrated on research in the greater Southeastern United States, Canada, the Caribbean, Mesoamerica, and the Mediterranean. Course work and research experiences are available in prehistoric and historical archaeology, underwater archaeology, geoarchaeology, zooarchaeology, environmental archeology, climate change and cultural heritage, sociocultural anthropology, folklore, economic anthropology, and osteology.

The Florida State University, through the Department of Anthropology, is the host institution for the Southeast Archeological Center (SEAC), which is responsible for archaeological research and collections from U.S. National Park Service installations throughout the southeastern United States, Puerto Rico, and the U.S. Virgin Islands. The SEAC collections exceed three million items and span the period from Paleoindian to the twentieth century. The center offices and laboratories are located in Innovation Park, southwest of the main campus.

As the capital of the state, Tallahassee also is home to the Department of State, which is responsible for cultural resources in Florida. The Florida Master Site File, the Bureau of Archaeological Research, the National Register of Historic Places, and Florida Folklife Programs are administered by the Department of State. The U.S. Forest Service and the State Park Service have offices in Tallahassee. Students have found internships and employment in all of these agencies.

Training and field experience are available in archaeology field and lab methods (terrestrial and underwater), physical anthropology, forensic sciences, and ethnography. Programs sponsored by other Florida State University departments of interest to anthropology students include courses offered in Classical Archaeology (Department of Classics), Geographical Information Systems (Department of Geography), computational forensics (Scientific Computing), historical administration (Department of History), Museum and Cultural Heritage Studies (Department of Art History), ethnomusicology (College of Music), international and multicultural education (College of Education), Digital/Data Humanities (Program in Interdisciplinary Humanities), and Emergency Management and Homeland Security (Center for Disaster Risk Policy).

General Information

Assistantships

To remain eligible for an assistantship after the first academic year, and in each subsequent year, a student must perform the assigned duties satisfactorily as determined by the Graduate Program Director and maintain a "good standing" status. The department's criteria for "good standing" are:

1. the student must not have received a grade below a "B" in any **anthropology** course;
2. the student must have a satisfactory GA performance evaluation;
3. the student may not have any incomplete grades older than one semester; and
4. the student must pass the departmental master's comprehensive examinations on the first attempt.

Master's students who are not in good standing are not eligible for continued support as a graduate assistant beyond their initial 9-month appointment. In other words, master's students who are not in good standing after their first two semesters in the graduate program will no longer be eligible for departmental funding.

Assistantships are subject to the Constitution and laws of the State of Florida and the United States, the regulations of the University, and the Collective Bargaining Agreement between Florida State University and the United Faculty of Florida - Florida State University - Graduate Assistants United (UFF-FSU-GAU). All graduate assistants at FSU work under the Collective Bargaining Agreement negotiated by the UFF-FSU-GAU and the Florida State University Board of Trustees. UFF-FSU-GAU is the labor union certified as the exclusive bargaining agent for graduate assistants at FSU. To find out more information about the UFF-FSU-GAU, or to join their action newsletter, visit <http://fsugau.org> or email info@fsugau.org.

Departmental Requirements for Master's Degree

Requirements for Admission

The Department of Anthropology offers the thesis-type Master of Arts and Master of Science degrees. Acceptance into the degree program is based on satisfactory revised Graduate Record Examination (GRE) scores of 150 on the Quantitative Reasoning section, 150 on the Verbal Reasoning section, and a 3.0 or better on the writing section; an undergraduate grade point average (GPA) of 3.0 or better; the applicant's statement of interest and research objectives; three letters of recommendation; and available space within the program. For students whose native language is not English, an official TOEFL score of 80 is required by the University.

Course Work Requirements

Students should review all college-wide degree requirements summarized in the "College of Arts and Sciences" section of this *Graduate Bulletin*. Each student seeking a master's degree in the Department of Anthropology must satisfy the following specific course requirements:

1. Completion of a minimum of thirty-one semester hours of graduate course credits, to include twenty-four hours of graded graduate credit with a "B-" or better in each course (i.e., not to include courses taken S/U). Eighteen hours must be anthropology courses and all hours must be 5000-level courses. Special permission may be given to credit 4000-level courses toward this requirement in cases where there is not a 5000-level equivalent. The maximum number of credit hours for the Anthropology master's degree is 70.
2. Each student is required to take the following core courses:
 - ANG 5117 Core Seminar in Archaeology (3)
 - ANG 5493 Core Seminar in Cultural Anthropology (3)
 - ANG 5513 Core Seminar in Physical Anthropology (3)
3. ANG 5002 Proseminar (1) should be taken during the first semester of the student's graduate studies or as soon thereafter as possible.
4. For the MA, completion of six semester hours of graduate credit in the humanities at the 5000 level. For the MS, completion of six hours in a related science field is recommended but not required.
5. Students must also register for ANG 8966: Master's Comprehensive Examination (0) during the Spring semester of their first year in the program.
6. Completion of ANG 5971: Master's Thesis (1-6) (minimum of six semester hours; a maximum of six hours may be counted toward completion of credit hour requirements for the degree).
7. During the semester in which the thesis is completed, students must register for ANG 5976: Master's Thesis Defense (0).
8. Fieldwork: FSU Anthropology faculty offer terrestrial and underwater field schools and expect and encourage graduate students to enroll in them.
9. Underwater Archaeology: If a student wishes to do underwater archaeological research, they will need to be an American Academy of Underwater Sciences (AAUS) diver with FSU. If the student is already an AAUS diver at their current institution, they will need to get a VOT (Verification of Training) from their Diving Safety Officer (DSO) transferred to FSU's DSO Chris Peters, cpeters@fsu.edu. Contact Chris to start making arrangements. If a student is not an AAUS diver already, they will need to take the scientific diving course offered in the Spring semester. To take this course, the student will need to already be certified as an open water diver with any diving agency. Contact Chris Peters (cpeters@fsu.edu) or Dr. Jessi Halligan (jhalligan@fsu.edu) for more information.

Register of Professional Archaeologists

Students concentrating in archaeology are encouraged to read the current standards of the Register of Professional Archaeologists (RPA). It is expected that students will keep documentation of their field and lab work experiences so that they may successfully apply for certification at the completion of the master's degree. Below are the basic requirements for RPA membership. Additional information and application instructions can be found at <https://rpanet.org/>.

There are four basic requirements to become a member of the Register of Professional Archaeologists:

1. The applicant must have an advanced degree (such as an MA, MS, PhD, or DSc) from an accredited institution in archaeology, anthropology, art history, classics, history, or other germane discipline with a specialization in archaeology.
2. As part of that advanced degree, the applicant must have designed and executed an archaeological study and have reported on that research in the form of a master's thesis and/or PhD dissertation. The thesis or dissertation must show a substantive data analysis by the applicant directed toward an explicit archaeological research problem.
3. The applicant must accept the responsibilities and standards described in the Code of Conduct, Standards of Research Performance, and Grievance Procedures of the Register of Professional Archaeologists.
4. If the applicant has an advanced degree as described above, but the thesis/dissertation did not include specific research on an archaeological topic and a substantive data analysis on that topic, and the applicant can document a similar research project with data analysis equivalent to that required for a thesis or dissertation through another report or publication, application can still be made by use of the documentation of such other reports or publications.

Standards of Performance

The department is responsible for ensuring that students meet standards of behavior that are congruent with expectations of the anthropological profession, as outlined in the American Anthropological Association's Principles of Professional Responsibility, the Society for American Archaeology's Principles of Archaeological Ethics, and the Register of Professional Archaeologists' Codes of Ethics & Professional Standards.

Students are also expected to comply with the FSU Academic Honor Policy (<https://fla.st/2K05KJO>) and the FSU Student Conduct Code (<https://dos.fsu.edu/srr/conduct-codes/student-conduct-codes>).

Academic Performance Standards

A student is expected to:

1. Maintain required grades for their academic program.
2. Correct any deficiencies related to academic probation within one semester.
3. Meet the generally accepted standards of professional conduct, ethics, personal integrity, and emotional stability required for practice. This includes, but is not limited to, the following: appropriate and respectful behavior with peers, faculty, staff, and professionals outside the university.
4. Consistently demonstrate effective interpersonal skills.
5. Consistently demonstrate respect and responsibility in matters of punctuality and presentation of self.
6. Fully meet the academic, personal, and professional standards set by FSU's Academic Honor Policy and Student Code of Conduct, the American Anthropological Association, the Society for American Archaeology, and the Register of Professional Archaeologists.
7. Consistently demonstrate abilities at an expected level in the areas of verbal and written communication skills.

Research Compliance and Integrity

All research must comply with federal, state, and local research regulations. These may include, but are not limited to: conflicts of interest, crowdfunding, use of drones, export controls, research data, research misconduct, responsible conduct of research, and human subjects committee. The current FSU policies on research compliance are available from the Office of Research Compliance Programs (ORCP): <https://www.research.fsu.edu/research-compliance/>.

University and College of Arts and Sciences Requirements

Students pursuing a thesis-type master's degree must complete the following university and college requirements. Please see your departmental advisor for additional departmental requirements.

1. Total hours: Minimum thirty, of which at least eighteen must be taken on a letter-graded basis.
2. Time limit: Master's students must complete all requirements for the degree within seven years of beginning coursework. (A student starting in Fall 2016 would have until the end of Summer 2023 to complete the master's degree.)

3. GPA: A graduate student must have a minimum 3.0 cumulative graduate grade-point average (GPA) to be eligible for the degree.
4. Thesis hours/final term registration: Student must successfully complete a minimum of six hours of thesis credit and must be enrolled in a minimum of two hours of thesis credit during each term in which they are working on their thesis. This includes the term in which they graduate (even if they have already completed the minimum of six hours).
5. Thesis defense: Students writing a thesis must register for Thesis Defense and have a grade of "P" posted. Students should only register for defense once. If defense is not completed the term of registration, the grade will remain "I" (Incomplete) until successfully defended.

Special Master of Arts (MA) requirements: In addition to the requirements listed above, candidates for the Master of Arts degree must meet the following requirements:

1. Proficiency in a foreign language demonstrated by satisfactory performance on the Graduate Reading Knowledge exam, or certification by the appropriate language department as proficient, or completion of twelve semester hours in a foreign language with an average grade of "B", or four years of a single language in high school.
2. Six or more semester hours of graduate credit in the following fields: art; classical language, literature, and civilization; English; history; humanities; modern languages and linguistics; music; philosophy; religion; and theatre.

Departmental Master's Comprehensive Examination

1. The faculty members of each subfield will work together to create the format and standard set of exam questions. All subfield faculty members will be responsible for grading the exams from their respective subfield within 15 days of the completion of the comprehensive exams.
2. Comprehensive exams will be taken as follows: Archaeology and Cultural will be taken at the beginning of the Spring semester of the student's first year (this assumes the student completed the corresponding Graduate Core Seminars the previous semester); the Physical comprehensive exam will be taken at the end of the Spring semester in which the student takes the Graduate Physical Anthropology Core Seminar.
3. Students will enroll in ANG 8966 Master's Comprehensive Exams in the Spring semester in which they take the exams. The Graduate Program Director will be the faculty of record.
4. Students must pass all three comprehensive exams in order to progress to the prospectus and thesis stage.
5. If a student fails any exam, they will have the option for one more attempt at each failed exam. The student must re-take each failed exam within 45 days of the first attempt, at a date and time agreed upon by the student, Graduate Program Director, and subfield faculty members. Faculty members of the subfield will write new exam questions for the re-take exam and grade them within 15 days.
6. Students who fail any portion of their comprehensive exams on their first attempt will be placed on departmental probation and will not be eligible for funding in the subsequent academic semester.
7. If a student fails the same comprehensive exam twice they will not be able to remain in the graduate program.

Graduate Reading Lists

Graduate reading lists in cultural anthropology, physical anthropology, and archaeology are included as part of the graduate handbook.

Schedule of Classes

Usually by mid-semester, the department staff assembles the schedule of classes for the upcoming semester. The list will be available on-line by the university, however, the department version is available earlier and may be obtained from the Graduate Director.

A one-year proposed schedule of classes is included in the graduate handbook to facilitate planning. Please note however, that courses can change depending on faculty schedules and the teaching needs of the department. Some classes are offered with greater frequency than others. Many classes are on a two-to-three-year rotation.

Plan of Course Work

The student, with his or her faculty advisor, should plot out several years of course work using the two-year proposed schedule of courses. This process should begin early in the Fall semester and should be updated or revised each semester. A copy of the form is included in the graduate handbook.

Thesis

The student shall choose a thesis committee consisting minimally of his or her major advisor and two additional regular faculty members, one of whom may be from another department within the university. Following the successful completion of the comprehensive examination, the student will present, within three months, a thesis prospectus to be approved and signed by his or her committee and placed on file in the department. This prospectus will contain a description of the proposed research and whatever other information and materials the student's committee deems appropriate. The student will work with his/her committee to complete the thesis and meet for an oral defense of the thesis.

Graduate Students with an Interest in Underwater Archaeology

Underwater archaeology at FSU is focused upon the discovery, excavation, and interpretation of inundated terrestrial sites, and therefore is methodologically oriented towards geoarchaeology and earth sciences research.

Students entering the Department of Anthropology to earn the Master of Arts or Master of Science degree are advised that courses in underwater archaeology are available, but these courses and technical preparation in this specialty will require additional time in the degree program. The usual course load for graduate students is twelve credit hours per semester. Most courses provide three hours credit, but techniques and field courses may carry more credit.

A minimum of thirty-one semester hours is required for the MA or MS degree. Students with no previous experience in either terrestrial archaeology or diving techniques can expect to graduate with significantly more (field and dive) hours than the average student.

Students who wish to participate in diving must be certified as an AAUS Science Diver through the Academic Diving Program at FSU. Students must have current First Aid and CPR training including training in AED and Oxygen Administrator training.

Students with no previous diving preparation are advised to take a diving certification course during the summer before admission to graduate studies at Florida State University or to take the PEN 1136 course for elementary diving certification during the first semester of registration (Fall). Because the PEN course is a 1000-level undergraduate course, it must be taken in addition to the regular course load. Tuition waivers, available to graduate students with assistantships or fellowships, do not apply to courses at this level.

Students with basic diving certification must, after admission to graduate studies, be evaluated by the Academic Diving Program as a first step in becoming certified as an AAUS Science Diver. FSU offers the following course for students wishing to become a certified AAUS Science Diver in order to take underwater archaeology courses or to participate in underwater archaeology courses: BSC 5476C, Introduction to Scientific Diving (3).

Students with no previous terrestrial archaeological field school experience are advised to enroll in a summer field school prior to entering graduate studies at Florida State University or enroll in the department Field School in Archaeology (ANG 5824, 9 hours credit) as soon as appropriate for their courses of study.

Definition of Prefix

ANG—Anthropology: Graduate

Graduate Courses

ANG 5002. Proseminar (1). (S/U grade only). This course is intended to be taken during the first semester of the student's graduate studies. The course is designed to acquaint the graduate student with the organization of anthropology as a profession and provide basic bibliographic tools and related anthropology skills.

ANG 5091. Seminar in Research Methods (3). This course acquaints students with the elements of scientific research designs as used in anthropology including research designs, consideration of the variations for field work and for laboratory/library projects. It also considers the format for the publication of results. Each of the elements of research design is considered and a variety of readings are utilized to understand the basic elements.

ANG 5111. Forager Societies (3). Prerequisite: Graduate status. This course focuses on human societies throughout the world that have lived by hunting and gathering wild resources. The course examines specific subsistence strategies of a wide range of hunter-gatherer groups, relative to their technology, social structure, territory, demography and interaction with food producers in both the archaeological record and through ethnography.

ANG 5115r. Seminar in Archaeology (3). In this course, seminar topics vary from semester to semester. Past topics have included paleodemography, quantitative methods, research design, and others. May be repeated within the same semester. Fifteen credit hours maximum.

ANG 5116. Regional Analysis in Archaeology (3). This is an advanced graduate-level seminar designed to explore archaeological approaches to modeling regional social processes. The course is restricted to graduate students who have had some training in archaeological methods and theory at the graduate level. The course considers theoretical frameworks and methodological approaches to understanding anthropological processes that are best studied with the region as the primary unit of analysis. The course also introduces students to classic and contemporary literature related to regional models in geography, anthropology and sociology, and assesses how those models have been applied in specific archaeological contexts. Students are required to gain hands-on experience conducting their own analysis of archaeological data at the regional level. May be repeated within the same semester. Fifteen credit hours maximum.

ANG 5117. Core Seminar in Archaeology (3). This course is designed to guide students to the essential works in archaeology of different parts of the world, whether they are classic readings or cutting-edge research.

ANG 5126. Zooarchaeology (3). This course is a practical introduction to the analysis of animal (and some plant) remains from archaeological sites. This course uses lecture, laboratory experience, and readings to introduce the student to the interpretation of subsistence remains and their implications for the reconstruction of prehistoric environments, ritual or ceremonial usage, technological requirements for capture and processing, chronological affiliation, human economics (both prehistoric and historic), and dietary choice.

ANG 5127. Advanced Zooarchaeology (3). Prerequisite: ANG 5126. This seminar is dedicated to learning and understanding data, analysis methods, and common software to assist with analysis and interpretations. This class covers in-depth all aspects of data collection, analysis, reporting and long-term preservation, including: structuring datasets.

ANG 5130. Fundamentals of Underwater Archaeology (3). Prerequisite: Graduate status. This course surveys the history, theory, methods, and problems of underwater archaeology, with attention given to the types of investigations and environments in which underwater archaeology is conducted and to the field's particular contributions to anthropology.

ANG 5145. Origins of Complex Society (3). This course examines the evolution of ancient complex societies and theories of state origins using a comparative method involving ecological, economic and social approaches to investigate their origins, collapse and sustainability.

ANG 5155. Regional Archaeology: Southeast United States (3). This course offers a critical evaluation of special problems and processes of cultural evolution and adaptation in the southeast.

ANG 5172. Historic Archaeology (3). This course serves as an introduction to the goals, methods, and theoretical base of this relatively new subfield of archaeology. Particular emphasis is placed on acculturation, ethnicity, archaeological methodology, and documentary research. Regional emphasis is on North America and the Caribbean.

ANG 5193r. Seminar in Archaeology (3). In this course, seminar topics vary from semester to semester. Past topics have included paleodemography, quantitative methods, research design, and others. May be repeated to a maximum of six semester hours.

ANG 5194r. Analysis and Interpretation of Archaeological Research (3). This course explores the principles of analysis and interpretation while bridging the gap between archaeological field data and activities that produced the data. May be repeated within the same semester. Fifteen credit hours maximum.

ANG 5240. Anthropology of Religion (3). This course addresses the cultural conceptions of supernatural reality, with emphasis on comparative understanding of myth and ritual, the religious experience, and religious evolution and revitalization movements.

ANG 5266. Economic and Ecological Approaches in Anthropology (3). This course is an introduction to the issues and literature of economic anthropology. The course explores exchange theory, gift and commodity distinctions, and the anthropological use of world-systems theory.

ANG 5275. Human Conflict: Theory and Resolution (3). This course provides an introduction to the nature and theories of human conflict from the interdisciplinary perspectives of biological and cultural anthropology, political economy, and the history of warfare. Particular emphasis is placed upon cross-cultural applications.

ANG 5426. Kinship and Social Organization (3). This course reviews historical and contemporary anthropological approaches to the study of kinship and social organization by reading and discussing ethnographies of family, marriage, and society throughout the world. Topics include classic theories of descent and alliance, symbolic approaches to kinship and social organization, genetic definitions of human relations, and the impact of new reproductive technologies on definitions of family, bringing the vast ethnographic literature on kinship to bear upon ongoing debates about definitions of family and society.

ANG 5471. Technology and Social Change (3). This course introduces the student to anthropological approaches to the study of technology and examines the relationship between technology and social change throughout human prehistory and history. The course explores the systemic relationship between technological developments and economics, politics, and social structure in both the past and present, using technology as a reference point for discussing important themes of anthropological and archaeological interest.

ANG 5491r. Seminar in Social Anthropology (3). May be repeated to a maximum of six semester hours within the same term.

ANG 5493. Core Seminar in Cultural Anthropology (3). This course introduces students to the body of literature in cultural anthropology, including the corpus of knowledge, the basic concepts, major scholars, and the debates over current issues in the profession.

ANG 5511r. Seminar in Physical Anthropology (3). May be repeated to a maximum of six semester hours within the same term.

ANG 5513. Core Seminar in Physical Anthropology (3). This course is a fundamental guide to the nature and progress of physical and biological anthropology, and presents the primary topics. It includes both historic and modern perspectives.

ANG 5580. Biocultural Adaptation and Paleodemography (3). This course focuses on the methods and strategies of biocultural and paleodemographic analysis. While it uses substantial bodies of archaeological data, the course is primarily a physical anthropology class. The course stresses the identification of appropriate data sets and methods.

ANG 5581. Method and Theory in Human Biology (3). This course provides an overview of current methods and theory in human biology research, with emphasis on adaptation, variation, and biocultural interactions in living human populations. This course also trains students in field methods for assessment of nutrition, growth and development, stress, and health, providing training in systematic ethnographic methods and modeling biocultural interactions.

ANG 5675. Core Seminar in Linguistic Anthropology (3). This course offers a broad survey of anthropological linguistics, from the origin and characteristics of human language and its relation to the other animal communication systems, to language structure and its description, principles of linguistic fieldwork, and historical/comparative linguistics. Other topics covered include the following: the interaction of language and culture; sociolinguistics; the ethnography of communication; ethnoscience; language acquisition; language policy and bilingual education; and linguistic prehistory.

ANG 5677r. Seminar in Linguistic Anthropology (3). In this course, topics offered include strong methodological and theoretical components, combined with in-depth coverage of an area or thematic subject. May be repeated to a maximum of nine semester hours within the same term.

ANG 5801. Field Methods in Cultural Anthropology (3). This course covers the methods and theories associated with cultural anthropological field work, from research design and project preparation to the presentation of reports based on research. Includes supervised field work projects.

ANG 5824r. Anthropological Fieldwork: Archaeology (3-9). The course focuses on the use of methodology learned in seminars. May be repeated to a maximum of nine credit hours.

ANG 5835r. Underwater Archaeological Methods (3-9). Prerequisite: ANG 5117. This field-based course is a technical introduction to underwater archaeology, including excavation, site discovery and sampling strategies, process and history of sea level rise and site preservation, and conservation of material recovered from underwater sites. May be repeated to a maximum of nine (9) credit hours.

ANG 5905r. Directed Individual Study (1-3). (S/U grade only). May be repeated to a maximum of twelve semester hours within the same term.

ANG 5906r. Directed Individual Study (1-3). This course allows students to study individually, under the direction of a faculty member. Topics vary and are usually selected on an individual basis. May be repeated within the same semester. Fifteen credit hours maximum.

ANG 5910r. Supervised Research (1-3). (S/U grade only). May be repeated to a maximum of three semester hours.

ANG 5940r. Supervised Teaching (1-3). (S/U grade only). May be repeated to a maximum of three semester hours.

ANG 5942r. Internship in Museum Studies (3-9). In this internship, collaborating museums and curatorial institutions provide students with a variety of professional work experiences, under the supervision of the student's academic advisor and a collaborating museum professional. May be repeated to a maximum of nine semester hours within the same term.

ANG 5971r. Master's Thesis (1-6). (S/U grade only). In this course, six semester hours of credit are required.

ANG 5976r. Master's Thesis Defense (0). (P/F grade only.)

ANG 6119. Geoarchaeology (3). This applied course covers the contribution of earth sciences to the interpretation of archaeological contexts. This course will consist of field, lab and lecture components. Emphasis is placed on the methods of geoarchaeology and the applications of selecting earth science fields to archaeological problems. Field trips are a required component of the course in order to complete field descriptions and sampling.

ANG 6484. Cultural Analysis (3). This course introduces an empirical approach to human behavior that recognizes culture as an organizing principle in all dimensions of human social life, from economic and political pursuits to gender, health, ritual, and reproduction. The course examines the place of culture in such anthropological schools as structural-functionalism, transactionalism, structuralism, symbolic anthropology, and practice theory, as well as in such alternative approaches as cultural materialism and evolutionary psychology.

ANG 6907r. Directed Independent Study (1-3). (S/U grade only). May be repeated to a maximum of six semester hours within the same term.

ANG 6908r. Directed Independent Study (1-3). May be repeated to a maximum of six semester hours within the same term.

ANG 6930r. Advanced Seminar in Anthropology (3). In this course, topics vary. May be repeated to a maximum of twenty-four semester hours within the same term.

ANG 6980r. Dissertation (1-12). May be repeated to a maximum of twelve semester hours within the same term.

ANG 8964. Doctoral Qualifying Examination (0). (P/F grade only.)

ANG 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

ANG 8985. Defense of Dissertation (0). (P/F grade only.)

APPLIED BIOLOGY:
see Biological Science; Nursing

ARABIC LANGUAGE:
see Modern Languages and Linguistics

Graduate Department of ART

COLLEGE OF FINE ARTS

Website: <http://art.fsu.edu/>

Chair: Stephanie James; **Professors:** Baade, Bookwalter, Garcia-Roig, Hanessian, Henne, Lindbloom; **Associate Professors:** Beekman, Duarte, Mann, Roberson, Rushin; **Assistant Professors:** Bouscaren, Ingram, Luedtke, Sleeper, Spence, Stagg; **Assistant Teaching Professor:** Curry; **Visiting Teaching Faculty:** DiDonna; **Professors Emeriti:** Bell, Blakely, Burggraff, Fichter, Hartwell, Rubini, Rutkovsky, Stewart

The Department of Art offers a course of study leading to the Master of Fine Arts (MFA) degree. The program is national in orientation and contributes to the cultural life of the University, the Tallahassee community, and the state of Florida. The strength of the department lies in the excellence of its artist-faculty members and their commitment to the personal practice of art as a vital part of a university.

A major role of the University is to maintain and develop a sense of research and inquiry. Within this context, students of the department are taught how to approach and solve visual problems in two and three dimensions. The program has several general goals: to stimulate students to the free expression of their creative ideas, to provide instruction in the skills and techniques necessary to this expression, to develop strong critical and self-reflective skills, and to guide students to an understanding of contemporary issues in the visual arts.

The curriculum of the Department of Art is largely designed to train professional studio artists, giving students the discipline, artistic, and critical understanding required for life as practitioners. Students develop the capacity for creative thinking and a sense of open inquiry, together with a thorough awareness of the multiplicity of new and traditional principles, thus enabling them to make a valuable contribution as artists, teachers, or arts administrators. For more information about our program, visit the Department of Art Web site at <http://art.fsu.edu/>.

Media

It is the graduate student's responsibility, in concert with his or her faculty, to find the appropriate media with which to express an original aesthetic vision. Work may be done in ceramics, electronic media, design, drawing, painting, performance, photography, printmaking, sculpture, video or any combination. The studio workshop class structure and interdisciplinary freedom that is part of the departmental philosophy allow the ideas to dictate the medium that students use.

Student and Faculty Responsibilities

Just as the primary responsibility rests with the students to find their own appropriate media, they are also expected to find an articulate visual language. The MFA program is for those persons who are ambitious and willing to grow as artists. As students, they must search for their own appropriate media and work toward becoming fluid practitioners in art. The faculty is challenged to respond to the students' individual needs, helping them in their search for a personal position in their work.

The representative career choices for graduates in studio art include: professional studio artist (painter, sculptor, photographer, ceramicist, printmaker, multimedia artist, digital arts artist), designer, creative director, illustrator, and production artist, to name the most obvious. Some graduates of the MFA program choose careers in college teaching, while others pursue careers as exhibiting artists or freelance designers. Additionally, the program fosters interdisciplinary research and investigation, preparing artists who can embrace unknowable future career options. Faculty members are proactive in assisting students with individual professional goals both during and after their degree.

Facilities

The department is housed in five locations, including large spaces converted to studio spaces and equipped to meet the needs of working artists. All MFA students are provided with a suitable space to work. In these spaces, students participate in group seminar classes and individual tutorials, and faculty members will typically visit the studio to talk about specific problems suggested by the work, or they may bring up more general artistic issues or technical problems. These discussions may be formal reviews with the student's thesis committee or may be very informal. A rich dialogue always occurs among students.

Graduate students also have access to the department's photography labs, sculpture labs, computer labs, digital fabrication labs, printmaking labs, sound and video editing lab, and installation rooms. The Facility for Arts Research (FAR) is a research facility that provides graduate students with an opportu-

nity to work with visiting artists and researchers on projects that investigate the integration of digital technologies with traditional processes. The Working Method Contemporary Gallery provides an exhibition space devoted to regular MFA exhibitions while also serving other departmental uses. This space offers monthly exhibition opportunities with excellent public exposure.

Visiting Artist and Scholar Program

The Department of Art recognizes the value of presenting diverse experiences to our students; the visiting artist and scholar program is essential to this goal. An active visiting artist and scholar program brings in artists, designers, and critics from all parts of the country who are experts in their field. They will usually give a public lecture, as well as student critiques, seminars, and workshops. The University's annual celebration of Opening Nights Performing Arts also brings prominent artists, critics, and historians to the campus.

Museum of Fine Arts (MoFA)

The Museum of Fine Arts is an integral part of the educational mission of the department. It has a tradition of originating exhibitions of important contemporary and historical issues, as well as bringing to the community some of the best shows other galleries have originated. The program regularly includes national and regional competitions and invitational, faculty, and student exhibitions, along with lectures and symposia devoted to significant developments in art history and art criticism. Graduating students display their thesis exhibitions in the museum. The University and the city offer a variety of other exhibition spaces.

Academic Study

Academic study is an essential part of the MFA program. A broad range of art history or other academic courses are available to help provide depth of understanding of fundamental artistic issues.

Financial Assistance

The art department offers financial support in the form of fellowships, teaching assistantships, and technical or laboratory assistantships. Those who are interested in a teaching assistantship are required to take a college art teaching course prior to the award. Technical assistantships may be awarded to first-year, second-year, and/or third-year students. Teaching assistantships may be awarded in the second and/or third year of residency except in the case of students with a master's degree or equivalent teaching experience, who may be awarded a teaching assistantship earlier. Financial assistance is awarded based on merit. For more specific information, see the "Financial Information" chapter of this *Graduate Bulletin*.

Graduate Students are also eligible for the following:

- Legacy Fellowships worth \$10,000 per year for three years

Requirements

Admission

In addition to University admission requirements, the department requires that all applicants submit a portfolio of up to twenty images of recent original work and an artist's statement describing and contextualizing the work submitted for review. Where it is necessary, other media, such as video, may be submitted. The Department of Art faculty admits graduate students in the Fall of each year. Please go to the Department of Art Graduate Program Web site at <http://art.fsu.edu/programs-2/graduate/> for more specific admission information and a link to the *MFA Handbook*. The Department of Art no longer requires the GRE examination if the applicant has a 3.0 or better cumulative average on work undertaken at the undergraduate level.

Program

The MFA is a terminal degree for those who wish to practice studio art, teach at the college level, or function in a curatorial role. It is a three-year residency with a minimum requirement of sixty semester hours at the graduate level. The program includes a minimum of forty-two semester hours in studio art, nine hours of electives within or outside the department, and a minimum of three courses (nine hours) in academic study at the graduate level. A minimum of nine hours of the forty-two studio art hours must go towards preparation of the graduate thesis exhibition and written component. All students are required to write a thesis paper as part of their graduation thesis exhibition. The thesis paper defines the intensive research leading up to the thesis exhibition and cites the student's artwork within a larger context.

Review Process

The student progresses through the MFA program by passing a series of reviews held each semester. During these reviews students present their work and engage in a constructive dialogue with the faculty. The students must pass their final formal committee reviews in conjunction with their thesis exhibition; students who do not pass are required to resubmit their work at a later time. For specific details regarding reviews, please go to the *MFA Handbook* <http://art.fsu.edu/programs-2/graduate/>.

Definition of Prefix

ARE—Art Education

ART—Art

Graduate Courses in Studio Art

ARE 5387. Teaching College Art (3). This course fosters the development of skills, knowledge, and experience needed for effective post-secondary art instruction.

Graduate Workshops

The workshop system permits the student to select professors based on the students' interests and needs.

ART 5907r. Directed Individual Study (1–4). (S/U grade only).

ART 5927Cr. Graduate Workshop (1–4). May be repeated to a maximum of fifty-one semester hours within the same term.

ART 5928Cr. Graduate Workshop (1–6). Prerequisite: ART 5927C. May be repeated to a maximum of fifty-one semester hours within the same term.

ART 5929Cr. Graduate Workshop (4). Prerequisites: ART 5927C and ART 5928C. May be repeated to a maximum of twenty-eight semester hours within the same term.

ART 5940r. Supervised Teaching (1–3). (S/U grade only). Prerequisite: ART 5927C. This course combines practical discussion, theory, and supervised practice in reference to teaching at the college level. May be repeated to a maximum of five semester hours.

ART 5972r. Graduate Show and Thesis (1–8). (S/U grade only). Students sign up for this course in preparation for their Show and Thesis review. This is typically during their fifth and sixth semesters of residency. A minimum of six semester hours credit is required. May be repeated to a maximum of twelve semester hours.

Graduate Department of ART EDUCATION

COLLEGE OF FINE ARTS

Website: <http://arted.fsu.edu/>

Interim Chair: Antonio C. Cuyler; **Professors:** Gussak, McRorie, Shamp, Villeneuve; **Associate Professors:** Broome, Cuyler, Parker-Bell, Rowson-Love, Shields, Van Lith; **Assistant Professors:** Fendler; **Specialized Faculty:** Gerber

The Department of Art Education empowers people to empower people through the arts. The distinguished faculty in the Department of Art Education is composed of nine members, each of whom holds the doctoral degree.

The graduate curricula lead to the Master of Arts (MA) in Arts Administration, which includes the newly developed program Museum Education and Visitor-Centered Curation; the Master of Arts (MA) and Master of Science (MS) in Art Education; the Master of Science (MS) in Art Therapy; the Doctor of Philosophy (PhD) in Museum Education and Visitor-Centered Curation; the Specialist (EdS), Doctor of Philosophy (PhD), and Doctor of Education (EdD) degrees in Art Education, including specialization options in Art Therapy and Arts Administration.

Admission to the Master's Degree Program

Applicants for admission to any of the options of the master's degree program should have an undergraduate major related to art, art education, arts administration, or thirty semester hours in art and/or art education coursework. Applicants can make up deficiencies after acceptance into the program, and in fact, it is expected that many candidates for option II will find this to be necessary. Additional admission requirements include: the completion of a questionnaire, official transcripts from all previous coursework, results from the Graduate Record Examinations (GRE), three letters of recommendation, a portfolio (provided in electronic format) of the candidate's studio work (and the candidate's student work if applicable), an academic writing sample, and a 1,000-word statement of purpose that should include career goals and why the applicant is applying to this program. Candidates must earn a minimum percentile ranking of 55% on the Verbal and 25% on the Quantitative portions of the GRE and a 3.0 grade point average (GPA) on a 4.0 scale for all hours after the first sixty semester hours of undergraduate education for admission to the program. In addition, two years of teaching experience is desired of applicants for option I.

Financial Assistance

Financial assistance is available through federal and state financial aid programs, departmental assistantships, and the college and University fellowships. Certain fellowships are available only to new Florida State University graduate students. Consulting work through the Teacher Education Center Office on campus is also available.

Applications for fellowships and scholarships should be made before January 1st preceding the year the applicant intends to enter. Teaching and research assistantships in the Department of Art Education are available. Applications submitted will be considered after the student has been accepted into the program. Teaching and research assistantship applications should be made to the department preceding the intended entrance to the program.

Requirements for the Five Year Direct-Entry Pathway Leading to a BA in Art/Master of Science (MS) Degree in Art Education

The primary mission of the five year direct-entry pathway leading to a BA in Art/Master of Science degree in Art Education is to build upon the students' knowledge obtained from the coursework expected from the BA from the Department of Art, and to provide coursework that will prepare art teachers for public and private school service who possess knowledge and skills in the arts, advanced theoretical and practical knowledge in art education, and understanding of the roles of education within wider contexts of culture and society. Certification requirements for teaching and administration are incorporated into individual programs of study to make the candidate eligible for K-12 certification in art in the state of Florida. Someone interested in pursuing this direct-entry pathway will have already been advised by the Department of Art. Course of study is available upon request.

Requirements for the Master of Arts (MA) and Master of Science (MS) Degrees in Art Education

Currently, this program is being revised to incorporate the new five year direct-entry pathway leading to the BA in Art/MS in Art Education. The primary mission of these degrees is to prepare art teachers for public and private school service who possess knowledge and skills in the arts, advanced theoretical and practical knowledge in art education, and understanding of the roles of education within wider contexts of culture and society.

Option I. Art Education Certification

Art Education with Certification provides comprehensive knowledge and skills in formal education systems. Students in this option are integrated into the track of students who are already progressing through the five year direct-entry pathway. Certification requirements for teaching and administration are incorporated into individual programs of study to make the candidate eligible for K-12 certification in art in the state of Florida. Remediation of art courses is determined by individual deficiencies at the bachelor's degree level.

Option II. Comprehensive Art Education

The *Art for Life* option is designed to develop knowledge and skills of contemporary theory, practice, and research in art education through artistic and scholarly inquiry and by exploring current and historical issues in art education, particularly in *art education for social justice* and *environmental issues*. This degree can be tailored to meet the student's individual needs. In addition to the core requirements, courses may be selected from studio art, art history, and courses from the arts and humanities.

Requirements for the Master of Science (MS) in Art Therapy

This degree is designed to explore the theory and practice of therapeutic techniques in art and to provide clinical experiences that translate theory into practice for the development of professional art therapists. The program is of particular interest to people serving special populations, individuals who work in community health facilities, and those who wish to meet Art Therapy Credentials Board (ATCB) requirements for registration. The program is constructivist in nature, requiring students to develop a unique approach to the use of art therapy with a diverse range of individuals. The degree emphasizes art therapy theory (ARE 5555, 5557, 5640, 5649); art therapy practice (ARE 5382, 5460, 5551, 5552, 5556); and clinical internships (ARE 5940L, 5941, 5942, 5943). Candidates for the degree will be required to write a thesis (a minimum of six semester hours) or complete a culminating project (a minimum of three semester hours) as part of the degree requirements in addition to completing the department requirements for master's level students (ARE 5245, 5641, 5745).

The program of studies in art therapy adheres to the American Art Therapy Association (AATA) guidelines for education and is an AATA-approved program. The program includes both academic content and clinical experience. In addition to thirty semester hours of art or art education prerequisites, twelve semester hours of psychology prerequisite courses are required and may include CLP 4143, PSY 2012, 4604, or DEP 3103, 3305. Candidates meeting graduate admissions standards will be invited to interview for the program.

Requirements for the Master of Arts (MA) in Arts Administration

The master's degree in arts administration educates aspiring cultural leaders about the practice and theory of socially responsible arts administration. The program, requiring a minimum of three semesters to complete, consists of a minimum of thirty-nine semester hours and includes: four courses in the arts administration core (ARE 5262, 5253, 5665, and 5865); a minimum of nine hours in general core requirements (ARE 5245, 5641, 5745, or 5935); nine hours in managerial coursework such as marketing, accounting, public administration, and human resources management; and nine hours of internship. The remainder of the program is based upon the needs of the individual student and the degree requirements of the College of Fine Arts. Applicants need not submit a portfolio.

Requirements for the Master of Arts (Ma) IN Museum Education and Visitor-Centered Curation

The M.A. major in Museum Education and Visitor-Centered Curation (EC) conflates museum education and exhibition functions. The EC major prioritizes addressing the educational needs of museum visitors through programming, interpretation, and exhibitions. The program consists of a minimum of thirty-nine hours and includes: three courses in common core (ARE 5245,

5641, and 5745); five courses in EC core (ARE 5258, 5295, 5665, 5256, and 5257); a minimum of three electives (ARH 3854, ARE 5253, ARE 5867, or LIS 5590); and six hours of internship with the option of completing at the Ringling Museum in Sarasota.

Requirements for the Specialist Degree in Art Education (EdS)

The Specialist in Art Education (EdS) is offered for those who wish to continue study without pursuit of the doctorate. This is a research and master-teacher degree for students with an extensive background in art education who wish to continue service in public education. Requirements and procedures are similar to the doctorate except for the substitution of a project for the dissertation.

Admission to the Doctoral Degree Program

The art education doctoral admissions requirements and procedures are subject to all regulations specified for graduate studies in the University's *Graduate Bulletin* for the academic year in which the doctoral student first matriculates.

Specifically, admission requirements include taking the Graduate Record Examinations, and candidates must earn a minimum percentile ranking of 55% on the Verbal and 25% on the Quantitative portions of the GRE or more, or a 3.5 GPA on a 4.0 scale on a master's degree from an accredited institution. The baccalaureate degree must be from an accredited college or university in art, art education, or related fields. Deficiencies may be made up. The applicant must be in good standing in the institution of higher education last attended. Additional admission requirements include: the completion of a questionnaire, official transcripts from all previous coursework, results from the Graduate Record Examinations (GRE), three letters of recommendation, a portfolio (slides or CD-ROM) of the candidate's studio work (and the candidate's student work if applicable) in a clear plastic sheet, an academic writing sample, and a 1,000-word biography that should include career goals and why the applicant is applying to this program.

Requirements for the Doctoral Degree in Art Education

Purpose of the Program

The program is designed to produce leaders in instruction, research, and administration in art education, art therapy, and arts administration and to encourage students to make a significant contribution to the body of knowledge that constitutes the teaching/learning and administering processes in the arts. The objectives of the program are sought through the following:

1. Selective admission procedures
2. A curriculum that is interdisciplinary and adaptive to deepening knowledge in a particular subspecialty
3. Continuous evaluation to ascertain achievement level and potential of the student for further development
4. Research opportunities and support
5. Close faculty-student relationships

In general, there are two major roles in the fields of art education, art therapy, and arts administration for which advanced graduate studies have relevance. The first role is that of practitioner in which the art professional concentrates on teaching, supervision, or administration. The second role is one in which it is the task of the art professional to produce historical, philosophical, or scientific theory applicable to art education, art therapy, and arts administration.

The doctoral program may lead to either the Doctor of Philosophy (PhD) or Doctor of Education (EdD) degree. Many of the recipients of the doctoral degree are now teaching on the faculties of colleges and universities throughout the United States as well as internationally, or are administering arts programs in educational or arts institutions and agencies.

Doctoral Degree Program of Studies

The three major area specialties in which the program is divided anticipate the spectrum of scholarship in this expanding field. The student may choose a concentration from one of the following areas of inquiry: art education, art therapy, or arts administration.

Residency requirements for the PhD entail that, after earning a master's degree, the student must be continuously enrolled on the University campus or in one of its teaching centers for a minimum of **twenty-four** graduate semester hours in any period of **twelve** consecutive months.

Residency requirements for the EdD entail that after earning a master's degree, the student must be continuously enrolled on the University's campus or in one of its teaching centers for a minimum of **thirty** hours in a period of **eighteen** consecutive months. The remaining years of study for either the PhD or EdD need not be continuous.

Diagnostic Examination. The applicant must meet University requirements for admission and pass a departmentally administered diagnostic examination.

Research Tool Requirements. The research tool requirement normally consists of sixteen semester hours including a research survey, statistics, and some combination of quantitative and/or qualitative methods tailored to meet the student's needs. These may include but are not limited to: historical methods; ethnography and other observational strategies; evaluation research; experimental, survey, and correlational methods; a foreign language; and/or philosophical inquiry. The research tool requirement is selected in consultation with the student's advisory committee and the graduate coordinator.

Three academic years of graduate study beyond the master's degree are usually required. All requirements for the doctoral degree must be completed within five calendar years from the time the student passes the **preliminary examination, or a new preliminary examination will be set by the committee.**

Requirements for the Doctoral Degree in museum education and visitor-centered curation

Purpose of the Program

The doctoral program in Museum Education and Visitor-Centered Curation (EC) combines museum education and exhibition functions to prepare scholars and museum leaders for the field with emphasis on social justice and organizational change. This program takes advantage of the expertise and resources available through The Ringling and FSU Museum of Fine Arts to prepare edu-curators, a term coined to express the program's vision for the future of museum practice. The objectives of the program are sought through the following:

- Selective admission procedures
 - A curriculum that is interdisciplinary and adaptive to deepening knowledge in a particular subspecialty
 - Continuous evaluation to ascertain achievement level and potential of the student for further development
 - Research opportunities and support
 - Close faculty-student relationships
- The doctoral program leads to a Doctor of Philosophy (PhD).

The degree consists of a minimum of sixty-four hours and includes: three doctoral seminar core courses (ARE 6380, 6937 (Philosophical Structures, and 6937 (Social Foundations); five Museum Education and Visitor-Centered Curation core courses (ARE 5258, 5295, 5665, 5256, and 5245); at least sixteen hours of research tools courses (ARE 5745, ARE 5257, six hours of research electives, and EDF 5400 Statistics); six hours of internship with the option of completing at the Ringling Museum in Sarasota (as needed); and a minimum of twenty-four dissertation hours.

Diagnostic Examination. The applicant must meet University requirements for admission and pass a departmentally administered diagnostic examination.

Three academic years of graduate study beyond the master's degree are usually required. All requirements for the doctoral degree must be completed within five calendar years from the time the student passes the **preliminary examination, or a new preliminary examination will be set by the committee.**

Definition of Prefix

ARE—Art Education

Graduate Courses

Note: Contact the department for more information.

ARE 5046. Art Education Theory and Practice I (3). Prerequisite: ARE 5358. Corequisite: ARE 5940. This course provides pre-service art education students with the practical knowledge and experiences of planning for learning, teaching methods, classroom management, discipline, and adapting and modifying for learning in art for diverse learners. Students learn the application of state and national standards to teaching art in K-12. Observation and participation in the K-12 public schools is required.

ARE 5047. Art Education Theory and Practice II (6). Prerequisites: ARE 5358 and 5046. Corequisite: ARE 5940. This course continues the themes and concepts learned in ARE 5358 and ARE 5046. The practice of teaching art is studied in combination with studio practice and methods within the context of environment and culture. The course requires extensive field components and prepares students for their student teaching experience.

ARE 5145. Human Development and Learning in Art (3). Prerequisite: Admission to the Art Education Teacher Certification Program. Corequisite: ARE 5046. This course provides a theoretical foundation for understanding what children know and learn through artistic inquiry and expression. The course emphasizes practical application of the knowledge to curriculum development and lesson planning. Observation in the public schools is required.

ARE 5245. Program Development for Educational and Community Contexts (3). In this course, students learn through the exploration and development of curricular and/or program development in the arts in formal and informal educational settings.

ARE 5246. Contemporary and Historical Issues in Art Education (3). This course is an exploration of current and historical issues in art education. In that context, the goal of this course is to present a conceptual overview of significant concepts and issues in art education through examining primarily current and historical writings and writers in the field. In addition, methods of historical and contextual research as well as issues related to writing history are also examined. All course assignments and experiences are formulated to encourage reflection and explorations between personal interests and experiences, artistic practices, scholarly inquiry, and interdisciplinary thinking.

ARE 5253. Arts in Community Engagement (3). This course introduces students to the practice and theory of arts-based community engagement. The course also includes service-learning fieldwork with a local cultural organization.

ARE 5256r. Visitor-Centered Exhibitions (3-6). Corequisite: ARE 5257. This course is designed to explore current visitor-centered theories, research tools, and practices in museum exhibition planning coinciding with hands-on curatorial experience.

ARE 5257r. Visitor Studies (3-6). Corequisite: ARE 5256. This course is designed to explore current visitor-centered theories, research tools, and practices in museum exhibition planning coinciding with hands-on curatorial experience.

ARE 5258. Museum Education (3). Prerequisite: Must be currently enrolled in a graduate-degree program in a department participating in the Museum Studies Certificate Program, or have a graduate degree in a related discipline. This course is an in-depth investigation of exemplary practices in contemporary museum education. Students study educational materials produced by exemplary museums, their use as models, current and potential uses of technology in the museum for interactive learning, researching of museum-school partnerships, including outreach and networking procedures and preparation of appropriate educational programming materials.

ARE 5262. Principles of Arts Administration (3). In this course, students study theories of the processes critical for establishing and sustaining non-profit cultural organizations including strategic planning, nonprofit organizational behavior and legal structures, life stages, and boards of directors.

ARE 5295. Art Museum Education (3). Prerequisite: ARE 5258. This course builds on a base established in the prerequisite course ARE 5258 Museum Education, and addresses education in the art museum context.

ARE 5304. Art in Childhood Education (3). This course is a theoretical examination of the elementary art program; study of significant literature and research in the field, and inquiry into methods and materials.

ARE 5358. Art for Life (3). This course consists of an examination of issues and concepts in art education, particularly from an "Art for Life" perspective, for pre-service art teachers. Course content includes exercises in aesthetic and critical inquiry related to art and visual culture as appropriate for K-12 educational theory and practice in art education.

ARE 5382. Introduction to Counseling for Art Therapists (3). Prerequisite: Instructor permission. This course examines the uniqueness of artistic expression in therapy. Implications for practical applications are presented for varying therapeutic needs. Methods of interactions with clients are explored with emphasis on building rapport, establishing trust, facilitating communication, initiating problem solving, and implementing termination of treatment.

ARE 5460. Therapeutic Use of Art Materials (3). Prerequisite: Instructor permission. This course is designed to give students fundamentals of how art materials are used therapeutically in educational, community, and clinical settings. Included in the course is a survey using art materials as a means of growth and discovery.

ARE 5551. Art Therapy and Group Counseling (3). Prerequisite: Instructor permission. In this course, emphasis is placed on group processes and the unique characteristics that art brings to group work. Group art therapy is examined from a theoretical perspective. The practical application of conducting art therapy groups with differing populations is explained.

ARE 5552. Assessments for the Practice of Art Therapy (3). Prerequisite: Instructor permission. This course emphasizes the use of projective and art-based assessment instruments for the art therapist. Students learn to write reports based on individual assessments and become familiar with medical charting, record keeping, and treatment planning.

ARE 5554. Special Populations (3). This course focuses on the use of art therapy with various special populations. Observation and participation opportunities are afforded so that students can develop skills in human relations, art therapy assessment and art therapy treatment planning for children and adolescents with special needs.

ARE 5555. Advanced Art Therapy (3). This course is a survey of art therapy through examination of its history, literature, populations, and professional opportunities.

ARE 5558. Multicultural Issues in Art Therapy (3). In this course, students gain knowledge in a number of areas related to multicultural trends and issues. Additionally, students are challenged to explore their beliefs and experiences relating to being part of a multicultural society and develop a self-awareness of how this affects them professionally. Through pedagogical instruction, class readings, resultant group discussions as well as personal reflections, students learn about multicultural sensitivities instrumental to developing appropriate counseling behaviors.

ARE 5640. Ethics and Professional Issues (3). Prerequisite: Instructor permission. This course content incorporates the code of ethical responsibility of the American Art Therapy Association. This code addresses the responsibility, competence, qualifications, standards, continuing education, confidentiality, client welfare, use of client expressions, and professional relations in art therapy. Current issues related to the national certification exam and licensure of art therapists in Florida provide insight for professional development.

ARE 5641. Critical Analysis (3). This course reviews historical and contemporary aesthetic and educational theories with implications for art education, arts administration, and art therapy. The primary strategy for teaching and learning is critical analysis, including descriptive, analytic, interpretive, and evaluative activity, related to prescribed and student-selected readings, as well as to contemporary works of art.

ARE 5649. Theories of Art Therapy (3). Prerequisite: Instructor permission. This course introduces the history of the development of theoretical structures for the practice of art therapy. Content is linked to multiple psychological perspectives including psychoanalytic, analytic, cognitive, and behavioral approaches. Theory and practice are presented through lectures, demonstration tapes, and studio experiences.

ARE 5665. Leading the Arts Organization (3). This course explores the consideration of the manager as a leader, individual styles of managing, functions of the manager of the arts, and typical problems in the various arts.

ARE 5745. Research Survey (3). This course is a survey of research in teaching, learning, and administration in the arts in formal and informal settings; survey of resources and published studies; proposal and grant writing and evaluation.

ARE 5865. Cultural Policy (3). This course conditions students to evaluate and proactively respond to the political environment and public policy issues that affect arts and culture at the city, county, state, national, and international levels.

ARE 5867. Grant Writing and Development in the Arts (3). This course explores the fundamental processes that influence the conceptualization, design, development, review, and management of a grant funded project in a nonprofit cultural organization. The course also features a service-learning component that allows students to prepare their assignments on behalf of and in consultation with a local nonprofit cultural organization.

ARE 5906r. Directed Individual Study (1-3). May be repeated to a maximum of nine semester hours.

ARE 5910r. Supervised Research (1-5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's or doctoral degree.

ARE 5930r. Special Topics in Art Education (1-3). This course discusses topics in art education, arts administration, and art therapy and varies from term to term. May be repeated to a maximum of fifteen (15) credit hours; repeatable within the same term.

ARE 5934r. Special Topics: Art Therapy Issues (1-3). Prerequisite: Instructor permission. This course varies content to offer intensive study regarding specific topics relevant to the practice of art therapy. These topics may include but are not limited to: treating sexual abuse, confronting substance abuse, coping with loss, utilizing family systems, and addressing multicultural issues. Please check with the Department of Art Education office for current topic(s). May be repeated to a maximum of nine semester hours.

ARE 5935r. Seminar: Current and Comparative Studies in Art Education (3). This course is an exploration of current issues in art education: 1) theory, research, and practice in the field, 2) teaching comprehensive art education. Currently, these courses include contemporary historical issues in art education, grant writing, multicultural issues in art therapy, qualitative research and visual arts research. May be repeated to a maximum of fifteen semester hours. May be repeated in the same term.

ARE 5940. Supervised Teaching (9). (S/U grade only).

ARE 5940L. Field Studies (1-3). (S/U grade only). Prerequisite: Instructor permission. This course introduces practicum experiences in school, community, or clinical settings. These work experiences are supervised by on-site personnel (i.e. art therapists, special educators, psychologists, counselors) and by university faculty with ATR-BC credentials. Supervision, equivalent to ten hours for every one 100 hours of field work, is integral to this practicum. Supervision sessions include discussion of assessment and implementation of client programs and progress, directed readings relevant to site participation, and professional development of the student art therapist.

ARE 5941. Practicum I (3). Prerequisite: Instructor permission. This course content is comprised of practicum experiences in a school, community, or clinical setting. These work experiences are supervised by on-site personnel (i.e. art therapists, special educators, psychologists, counselors) and by university faculty with ATR-BC credentials. Supervision, equivalent to ten hours for every 100 hours of field work, is integral to this practicum.

ARE 5942. Practicum II (3). Prerequisite: Instructor permission. Please refer to ARE 5941 above for course description.

ARE 5943. Practicum III (3). Prerequisite: Instructor permission. Please refer to ARE 5941 above for course description.

ARE 5944r. Field Laboratory Internship (1–9). (S/U grade only). May be repeated to a maximum of nine semester hours.

ARE 5950. Seminar and Professional Practices in Art Education (3). Prerequisites: ARE 5358 and 5047. Corequisite: ARE 5940. This course enables students to engage in professional development and critical reflection assignments, document their progress in mastering the twelve Florida Educator Accomplished Practices (FEAP) by preparing professional portfolios for both the elementary and secondary art teaching, modify curricula for diverse learners and contexts, and participate in online peer discussions. The class meets on campus during the first and eighth semester weeks.

ARE 5971r. Master's Thesis (3–6). (S/U grade only). Minimum of six semester hours required.

ARE 5972r. Specialist Thesis (3–6). (S/U grade only). Minimum of six semester hours required.

ARE 6380. Doctoral Seminar (3). This course focuses on the teaching-learning process in art education.

ARE 6905r. Directed Individual Study (1–3). (P/F grade only). May be repeated to a maximum of six semester hours.

ARE 6937r. Doctoral Seminar (3). This course focuses on the foundations of art education and the structure and communication in art education. May be repeated to a maximum of six semester hours within the same term.

ARE 6980r. Dissertation (1–12). (S/U grade only). May be repeated to a maximum of twelve semester hours.

ARE 8962r. Specialist Comprehensive Examination (0). (P/F grade only.)

ARE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

ARE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

ARE 8976r. Master's Thesis Defense (0). (P/F grade only.)

ARE 8977r. Specialist Thesis Defense (0). (P/F grade only.)

ARE 8985r. Dissertation Defense (0). (P/F grade only.)

ART HISTORY:
see also Asian Studies; Classics

Graduate Department of ART HISTORY

COLLEGE OF FINE ARTS

Website: <http://arthistory.fsu.edu/>

Chair: Adam Jolles; **Professors:** Freiberg, Neuman, Weingarden; **Associate Professors:** Bearor, Carrasco, Dowell, Jolles, Jones, Leitch, Neill; **Assistant Professors:** Bauer, Bick, Killian; **Instructional Support Specialist III:** Hudson; **Professors Emeriti:** Draper, Gerson, Nasgaard, Rose; **Courtesy Professors:** Berry, de Grummond, Emmerson, Lee, McLane, Pfaff, Pullen

The Department of Art History offers programs leading to the Master of Arts (MA) in the history and criticism of art, Master of Arts (MA) in museum and cultural heritage studies, and the Doctor of Philosophy (PhD) in the history and criticism of art. The objective is to prepare the student for a professional career either in academic art history or in a related profession, including work in museums and archives, commercial galleries, and publishing. Four distinct programs provide the greatest flexibility in serving students' career goals (see below for specific program descriptions and requirements).

The faculty includes specialists in Islamic art, Pre-Columbian art, Spanish Colonial and Caribbean art, Early Medieval and Byzantine art, Romanesque and Gothic art, Italian and Northern European Renaissance art and architecture, Baroque and 18th-century art and architecture, modern architecture, 19th- and 20th-century art and criticism, American art, contemporary art and critical theory, history of prints and photography, word-image studies, and museum studies. Members of the Classics faculty trained in archaeology and art history offer courses in Aegean, Greek, Etruscan, Roman, and Egyptian art.

The Department of Art History is supported by a rich array of resources, including classrooms, seminar rooms, a teaching lab fully equipped for multi-media presentations, and a media center under the direction of a full-time curator. The media center houses a comprehensive collection of digital resources, including a database of more than 45,000 images. Additionally, the **School of Art and Design Library** includes over 6,500 art-related books. The University library holdings are extensive and include a rare book and facsimile collection. The library supports many electronic resources and an excellent interlibrary loan division. The resources of the Ringling Museum Library as well as those held by other state universities in Florida are also available.

The **University Museum of Fine Arts** houses several permanent collections and is used for temporary exhibitions. The University administers the **Ringling Museum** in Sarasota, with its internationally known collection of European and Asian art. Internships are available at each of the Florida State University's museums.

Students have the opportunity to pursue independent research at the Florida State University Study Centers in Florence, London, Panama, Paris, and Valencia. The Florence program is used extensively by students of the history of art for the study of the Italian language and arts and for archival work. The London Study Center offers opportunities for teaching assistantships and for internships at major London museums. The Paris program hosts a specialized program in art history taught by the Department of Art History faculty. Archaeological experience is available at the Etruscan and Roman sites of Cetamura del Chianti and Poggio delle Civitelle at San Venanzo, the University's field school excavations in Italy.

The department sponsors an annual **Art History Graduate Symposium** for graduate students attending universities nationwide. Students are chosen to present papers during a two-day series of meetings, and these papers may be submitted for publication in *Athanos*, a journal for graduate students in art history sponsored by the Art History Department and the College of Fine Arts. Each year a distinguished art historian is invited to participate in the symposium and to deliver the keynote address.

Financial Assistance: The department offers teaching fellowships for doctoral students and stipends for MA students. Department, college, and university assistantships are available as well, and are based on past record and future potential in the arts professions. Mason Travel Funds and Mason Research and Writing Grants are available at the doctoral level. Students also may qualify for federal and state financial aid programs.

Programs

In addition to the Doctor of Philosophy (PhD) in the history and criticism of art, the department offers two Master of Arts degrees: the MA in the History and Criticism of Art and the MA in Museum and Cultural Heritage Studies. Applicants who already hold a MA in art history may apply for admission to the PhD program.

Master of Arts (MA) in the History and Criticism of Art

This degree offers theoretical and practical training in the investigation and management of cultural heritage. It is aimed at both those who wish to study

museum practices and cultural heritage as an academic subject and those who wish to obtain employment in museums and other cultural heritage agencies. The MA provides students with the necessary research, conceptual, and analytical skills needed to fill the demand for qualified museum and cultural heritage professionals and to provide a solid academic foundation for advanced research.

The program requires thirty-six credit hours: twelve hours of required core courses, six to nine hours in Art History courses (depending on the track), six hours in Museum and Cultural Heritage electives (that may be taken outside the department), six to nine hours of internship credits (depending on track), and a three-credit capstone project. Students are required to demonstrate proficiency in one foreign language.

A minimum grade of “B–” is necessary for courses to be counted toward fulfillment of these credits.

Master of Arts (MA) in Museum and Cultural Heritage Studies

This degree offers theoretical and practical training in the investigation and management of cultural heritage. It is aimed at both those who wish to study museum practices and cultural heritage as an academic subject and those who wish to obtain employment in museums and other cultural heritage agencies. The MA provides students with the necessary research, conceptual, and analytical skills needed to fill the demand for qualified museum and cultural heritage professionals and to provide a solid academic foundation for advanced research.

The program requires thirty-six credit hours: twelve hours of required core courses, six to nine hours in Art History courses (depending on the track), six hours in Museum and Cultural Heritage electives (that may be taken outside the department), six to nine hours of internship (depending on track), and a three-credit capstone project. Students acquire expertise in a major area by taking three of their five Art History courses in a single field of study. Students are required to demonstrate proficiency in one foreign language.

A minimum grade of “B–” is necessary for courses to be counted toward fulfillment of these credits.

Doctor of Philosophy (PhD) in the History and Criticism of Art

The Doctor of Philosophy is a research degree designed to form a critical and productive scholar by focusing on a particular field within the history of art. The degree is suited to students who intend to continue to advanced work at the highest level, either in university teaching or in a museum. The successful candidate will demonstrate the ability to conduct original research and to integrate it with larger domains of knowledge. The program consists of a minimum of thirty-six semester hours of coursework beyond the master’s degree plus a minimum of twenty-four semester hours of supervised dissertation research. A minimum grade of “B–” is necessary for courses to be counted toward fulfillment of the degree requirements. The requirements are as follows:

1. One course in methods of art history (ARH 5813) if not already taken at FSU
2. Four courses in a major area of study (Medieval, Renaissance/Baroque, Modern/Contemporary, or Visual Cultures of the Americas)
3. Five courses, of which two may be electives to be selected in consultation with the student’s major professor and the graduate advisor. These might be taken in other areas of art history or in other disciplines (courses must be approved by the graduate advisor and are dependent on the major and minor areas of study)
4. Twenty-four semester hours of supervised dissertation research
5. Demonstration of reading knowledge in a second foreign language (usually French and German are preferred but language requirements for students with a specialization in non-Western art may differ). Depending upon area of specialization, additional languages may be required
6. Satisfactory completion of a doctoral examination concerning material in the major field
7. Satisfactory defense of a dissertation that makes an original contribution to scholarship

It should be noted that the University requires that doctoral students participate in Scholarly Engagement that encourages interaction with peers on a national level by presenting at conferences, seminars, and symposia.

Definition of Prefix

ARH—Art History

Graduate Courses

ARH 5068. History of Modern Architecture (3). This course traces the major tendencies of European and American architecture from the Enlightenment to World War II. Topics include the relationship between the construction of national identity and the development of architectural form, the roles of historicism and revivalism in architecture of the period, and the development of new industrially-produced materials in both public and private spaces.

ARH 5076. Word and Image Studies (3). This course offers an introduction to the methodologies and purposes of word and image studies, especially in terms of the relationship between visual and literal material culture. The course focuses on interartistic and interdisciplinary topics.

ARH 5111. Art and Archaeology of the Bronze Age in the Aegean (3). This course is a detailed study of the major archaeological evidence related to the Bronze Age in Crete and Greece; the major sites, monuments, and artistic works are studied and analyzed.

ARH 5119. Archaeology in Ancient Egypt (3). This course is a survey of the archaeology and art of Ancient Egypt from the Pre-dynastic to the Ptolemaic and Roman periods. Emphasis is placed upon the art, architecture, and culture of the Old and New Kingdoms.

ARH 5125. Etruscan Art and Archaeology (3). This course is a critical study and appraisal of Etruscan monuments and artistic works; major archaeological evidence for Etruscan culture.

ARH 5140. Greek Art and Archaeology of the Fifth and Fourth Centuries BC (3). This course is a careful study of the monuments of classical Greece and its artistic productions; study of archaeological evidence and the accomplishments of classical Greek Art.

ARH 5160. Art and Archaeology of the Early Roman Empire (3). This course is an analysis of Roman architecture, painting, sculpture, and other arts from Augustus through the Antonines, and the archaeological evidence for the chronology and cultural history of the early imperial period.

ARH 5174r. Studies in Classical Art and Archaeology (3). This course focuses on studies in specific aspects of Greek and Roman art and archaeology. May be repeated to a maximum of six semester hours.

ARH 5220. Early Christian and Byzantine Art (3). This course explores Byzantine art and architecture from the rise of Christianity in the second and third centuries to the end of the sixth century. Emphasis is placed on how imperial rulers used art to further their political and religious agendas.

ARH 5221. Early Medieval Art (3). This course considers the development of the uses of art in the European Middle Ages, from Barbarian metal work to the acceptance of the classical tradition, to the first mature pan-European art of Romanesque architecture and sculpture. Topics of special interest include pilgrimage, imperial imagery, manuscripts, and monasteries.

ARH 5222. Medieval Illustrated Manuscripts (3). This course traces the history of book illustration in Western Europe from Insular Gospel Books (ca. 700) and Carolingian Bibles (ca. 800) to deluxe Gothic literary and devotional books produced until the introduction of printing during the later Middle Ages (ca. 1450).

ARH 5223. Late Antique and Early Christian Art (3). This course focuses on the art and architecture in Late Antiquity, a time of transition from the Roman to the Medieval periods. Emphasis is on the processes of transmission, adoption, and adaptation of established iconographies and architectural forms from Jewish and pagan arts to serve the needs of the newly established Christian religion.

ARH 5240. Later Medieval Art (3). Generally called Gothic art, this course explores the cathedrals (including their sculpture and stained glass) built by bishops and towns, as well as the castles, sumptuous arts, and manuscripts commissioned by princes and lords. Topics of special interest include the Black Death, devotional art, civic expression, and the arts of the courts.

ARH 5321. Early Italian Renaissance Art: 15th Century (3). This course is an examination of how social and historical issues influenced the arts during the first great cultural flowering of the Renaissance in Florence, Rome, and Venice. Discussion centers on how the requirements of the patron, the vitality of local traditions, and the interaction among the arts all contributed to the creation of the new Renaissance vocabulary.

ARH 5322. Later Italian Renaissance Art: 16th Century (3). This course examines works by the great masters of the Renaissance, including Leonardo da Vinci, Michelangelo, and Titian, against the backdrop of the social and political realities of the day. Discussion will include the rise of the artist-hero, the sources and meaning of Mannerism, and the impact of the religious controversies of the age.

ARH 5340. Northern European Renaissance Art (3). This course discusses developments in northern European fifteenth and sixteenth century art with emphasis on painting and printmaking: Flemish, French, German, and Dutch artists.

ARH 5360. Southern Baroque Art (3). This course investigates painting, sculpture, and architecture in Italy and Spain during the 17th century, stressing the theatrical, ecstatic, and virtuoso character of works produced for royalty, the Church, and the rising middle class by such masters as Caravaggio, Bernini, and Velázquez.

ARH 5361. Northern Baroque Art (3). This course examines the Golden Age of painting, sculpture, and architecture in France, England, and the Netherlands. Discusses how such figures as Rembrandt and Vermeer encoded meaning in works of detailed realism and contributed to the rise of new subjects in art, including still-life, landscape, and portraiture.

ARH 5363. 18th-Century Art (3). This course is a study of painting, sculpture and architecture produced in Western Europe during the Enlightenment, with emphasis on the luxurious, sensual art of the Rococo, the rational classicism of the Palladian Revival, the new moral and philosophical image of women, and the rise of the decorative arts.

ARH 5420. Modern European Art: Neoclassicism through Impressionism (3). This course discusses European art from 1780–1880, concentrating on the evolving dialogue between academic and anti-academic practices through an investigation of the relationship between theory, criticism, and techniques of representation. Topics of inquiry include: David and Neoclassicism; British landscape painting; Delacroix and French Romanticism; Courbet's Realism and Manet's Naturalism; and French Impressionism.

ARH 5445. Modern European Art: Postimpressionism through Surrealism (3). This course covers the development of art from 1880–1940. Topics of discussion include abstraction, symbolism, surrealism, as well as the relationship between the techniques and forms of abstract representation and contemporary philosophical, social, scientific and political events. The writing of artists and critics provide the basis for this inquiry.

ARH 5556. Arts of Japan (3). This course is an introduction to the arts and culture of Japan, focusing on key monuments and artistic traditions that have played a central role in Japanese art and society. It covers, chronologically, the Pre-historic Age, Shinto, Buddhism, Court Culture, Zen Buddhism, Samurai Government, and the Industrial Age.

ARH 5558. Arts of China (3). This course is a survey of the major epochs of Chinese art from prehistoric times to the modern period. The course examines the important artistic traditions developed in China: bronzes, funerary and architectural monuments, painting and calligraphy, Buddhist sculpture, and ceramics.

ARH 5575. Islamic Art and Architecture, 7th - 21st Centuries (3). This course focuses on Islamic art, architecture, and urbanism. It covers the definition of Islamic art and architecture, the historical placement of Islamic art within the medieval context, the problem of ornamentation and figurative representation in the Islamic artistic tradition, the question of revivalism and reappropriation of antiquities and classical styles, as well as the politics of the study of Islamic art and its historiography.

ARH 5605. Native American Arts and Architecture of the Southwest (3). This course discusses the arts and architecture of the Native American peoples of the Southwest, beginning with ancient times and emphasizing the arts of the present Pueblo people from the 16th century to the present.

ARH 5625. American Art before 1940 (3). Prerequisite: Graduate standing in art history or instructor permission. This course familiarizes students with the literature in the history of U.S. art relevant to the period covered and the critical issues driving the field. Theme for the seminar varies.

ARH 5648. Art after 1940 (3). This course covers American and European art from Abstract Expressionism to the present. The course examines the reactions against Abstract Expressionism and investigates late-modernist practices (e.g., Pop Art, Minimalism, Conceptualism, Earth Art, Performance Art). Topics discussed include contemporary artistic practices and the relationship between modernism and postmodernism.

ARH 5659. Great Traditions in Mesoamerican Art and Culture (3). This course introduces the art and architecture of Mesoamerica from the rise of the Olmec (1500 B.C.) to the Spanish conquest of the Aztec capital of Tenochtitlan in 1521. Focus is placed on how changes in visual culture reflect larger religious and political transformations.

ARH 5715. History of Photography (3). This course examines the history of photography from its invention in the 1830s to the present. Topics covered include historical debates about photography's status as an art form, commercial and scientific applications, photojournalism and propaganda, the rise of amateur photography, as well as contemporary trends and practices. Focus is placed on recent scholarship in the field.

ARH 5725. History of Graphics (3). This course is a survey of artists and processes in western printmaking from woodcut to silk screen.

ARH 5797. Seminar in Museum Studies (3). This course explores theoretical and practical approaches to museum operation and the historical development of the art museum in America.

ARH 5799. Cultural Heritage Theory and Practice (3). This course is a graduate level introduction to key issues in the field of cultural heritage, including such topics as definitions of tangible and intangible cultural heritage, the role of public opinion and tourism in the protection and interpretation of cultural heritage, the impact of development and conflict, questions of authenticity and identity, international law, and ethics.

ARH 5806r. Seminar in the History and Criticism of Art (3). This course is a special topics graduate seminar in the History and Criticism of Art. May be repeated to a maximum of thirty-three semester hours. May be repeated within the same term.

ARH 5813. Seminar in the Methods of Art History (3). This course is a seminar in methodology required of art history graduate students.

ARH 5838. The Museum Object (3). Prerequisite: Must be currently enrolled in a graduate-degree program in a department participating in the Museum Studies Certificate Program or have a graduate degree in a related discipline. This course covers the philosophy and practice of acquiring the museum object; the processing of the object in an institutional setting; research methods and interpretation; philosophy in methods of presenting the object and its interpretation through exhibition and display; and various forms of publications and dissemination.

ARH 5864. Methods and Theory for the Study of World Arts (3). Prerequisite: ARH 5813. This course offers an introduction to the primary methodological and theoretical foundations for the study of World Arts. Students question how World Arts are defined, study relevant methodologies (e.g., anthropology, post-colonial studies, and cultural studies), consider traditional-art historical methodologies from a World-Arts perspective, and examine critical issues pertaining to the study of art and architecture of particular world areas.

ARH 5885. Introduction to Appraising Personal Property (4). This course is a basic introduction to appraising personal property. It covers all aspects of proper appraisal procedure and methodology for fine art: painting, drawing, sculpture, prints, ceramics, silver, glass, jewelry, books, etc. This course follows the proper requirements of USPAP and the IRS.

ARH 5886. Uniform Standards for Professional Appraisal Practice (USPAP) (4). This course follows the U.S. Government Uniform Standards of Professional Appraisal Practice as they apply to the Fine Arts.

ARH 5887. Walt Disney and the American Century (3). This course considers the artistic output of Walt Disney and his company in relation to fine art, society and politics during the twentieth century, emphasizing contributions in the realms of film, architecture and the theme park. In an effort to judge Disney's impact on the production and consumption of leisure, students engage with some thirty years of academic critical discourse.

ARH 5907r. Directed Individual Study (1–5). May be repeated to a maximum of nine semester hours within the same term.

ARH 5913r. Supervised Research (1–15). (S/U grade only). May be repeated within the same term to a maximum of fifteen semester hours. A maximum of three semester hours may apply to a master's degree.

ARH 5940r. Supervised Teaching (1–15). (S/U grade only). May be repeated within the same term to a maximum of fifteen semester hours. A maximum of three semester hours may apply to a master's degree.

ARH 5942r. Internship in Museum Studies (1–6). This course is an internship in a collaborative museum to provide students with firsthand knowledge of, and practical experience in, museums. Concurrent registration is permitted. May be repeated to a maximum of twelve semester hours within the same term.

ARH 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours credit is required.

ARH 6292r. Topics in Medieval Art: Seminar (3). This course is an advanced seminar on specific topic within the area of Medieval art. Specific topics vary. May be repeated to a maximum of nine semester hours.

ARH 6394r. Topics in Renaissance Art: Seminar (3). This course is an advanced seminar on specific topic within the area of Renaissance art and architecture. Specific topics vary. May be repeated to a maximum of nine semester hours.

ARH 6398r. Topics in Baroque Art: Seminar (3). This course is an advanced seminar on specific topic within the area of Baroque art. Specific topics vary. May be repeated to a maximum of nine semester hours.

ARH 6592r. Topics in Eastern Art: Seminar (3). This course is an advanced seminar on specific topics within the area of Eastern art. Specific topics vary. May be repeated to a maximum of nine semester hours.

ARH 6694r. Topics in 19th-Century Art: Seminar (3). This course is an advanced seminar on specific topic within the area of nineteenth century art. Specific topics vary. May be repeated to a maximum of nine semester hours.

ARH 6695r. Topics in 20th-Century Art: Seminar (3). This course is an advanced seminar on specific topic within the area of twentieth century art. Specific topics vary. May be repeated to a maximum of nine semester hours within the same term.

ARH 6718. Documentary Photography and Film (3). This seminar studies the forms, strategies, conventions, and criticism of documentary photography and film in the U.S., from the late 19th century to the present. The course considers the rhetoric of the images and the contemporary circumstances in which that rhetoric is bound, while also locating the tensions between reality and the fictionality of representation.

ARH 6904r. Readings for Examinations (1–12). (S/U grade only). This course is designated for graduate students who have completed or virtually completed all of their required coursework and are preparing for their comprehensive examinations. May be repeated within the same term to a maximum of twenty-four semester hours.

ARH 6920r. Teaching Colloquium in Art History (1–12.) (S/U grade only). This course is designed for all doctoral students who have not yet reached candidacy and all graduate students teaching for the department for the first time. May be repeated from term to term to a maximum of twelve semester hours.

ARH 6936r. Topics in World Arts: Seminar (3). This advanced seminar covers specific and variable topics within the area of World Arts. May be repeated to a maximum of nine semester hours.

ARH 6937r. Doctoral Seminar in Classical Archaeology (3). Prerequisite: CLA 5936. This course is a doctoral-level seminar devoted to a specific issue in classical archaeology. May be repeated when topics vary to a maximum of twenty-four semester hours.

ARH 6980r. Dissertation (1–12). (S/U grade only). May be repeated to a maximum of twelve semester hours.

ARH 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

ARH 8967r. Master's Comprehensive Examination (0). (P/F grade only.)

ARH 8976r. Master's Thesis Defense (0). (P/F grade only.)

ARH 8985r. Dissertation Defense (0). (P/F grade only.)

ASIAN HISTORY:
see Asian Studies; Classics; History-Asian History

Graduate Program in ASIAN STUDIES

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <https://coss.fsu.edu/asianstudies>

Director: Lee Metcalf (Social Science); Director of Undergraduate Studies: Whitney Bendeck (Social Science); Director of International Economic Education: Onsurang Norrbin (Economics); Director of Internships and Professional Development: Na'ama Nagar (Political Science)

Asian Studies is an interdepartmental program leading to the Master of Arts (MA) or Master of Science (MS). The program is designed to give students a well-rounded understanding of Asian culture. Courses are offered in the areas of political science, economics, sociology, public administration, urban and regional planning, history, anthropology, geography, humanities, language, literature, religion, art history, and music. Many students in the program anticipate careers in government, business, international organizations, journalism, or teaching. Other students use the program as a stepping stone into more specialized doctoral programs, by developing a language and area competence and through exposure to graduate coursework prior to entering a PhD program in one of the disciplines represented by the participating Asian Studies faculty.

Study Abroad Programs

Asian Studies students are encouraged to participate in the University's summer study program in China or in another appropriate program. See International Programs <http://international.fsu.edu> and consult with Asian Studies program director.

Internships

Asian Studies students have the opportunity to do an internship designed to provide practical experience that will complement traditional coursework. Interns can expect to gain valuable work experience, develop professional skills, cultivate valuable contacts and investigate career options. The internship allows students to receive academic credit for internship placement in approved agencies and organizations. Information about internships and application materials are available on the International Studies Organization site. All internships must be approved by the program director the semester before the internship takes place.

Requirements

Admission Requirements: A candidate is admitted to the degree program by meeting the University's general requirements for graduate admission and by recommendation of the director and executive committee of the degree program. It is recommended that the student have undergraduate preparation in those fields where graduate work is contemplated. A candidate is admitted to the program by meeting the general requirements for graduate study. All applicants must take the verbal and quantitative portions of the Graduate Record Examinations (GRE) or equivalent prior to admission to the program. International Students must submit official English Proficiency Test scores (TOEFL or IELTS) if their native language is not English.

Program Requirements: The program is a total of thirty-one (31) credit hours, where students choose between completing a comprehensive exam or thesis route. Students selecting the first option will undergo comprehensive examination on the coursework taken for the degree during their last semester in the program. With the advice and consent of the director and the participating faculty, the student selects a three-person committee from among the listed Asian studies faculty to supervise the student's degree program. The committee members must be drawn from at least two different disciplines. The student's supervisory committee will administer the exam.

Students selecting the thesis option will designate one of their committee members to serve as their major professor at least two semesters prior to completing their degree program. Students will then work closely with this major professor throughout the stages of outlining, researching, and writing their thesis, and six of their required thirty semester hours are to be taken as thesis hours. In lieu of a comprehensive written examination, students selecting this option will be examined by an oral defense of their thesis before their supervising committee. The choice between the comprehensive exam and thesis route will depend upon career objectives. Students must have prior approval of the director before selecting the thesis option.

Course Requirements: Students are required to take INR 5935r Special Topics (Colloquium) or an approved equivalent. This is a one credit pass/fail course that is designed to foster knowledge about the career field. Students may select courses broadly from the listing of coursework below, so long as they take a minimum of six semester hours in history and six semester

hours each from the social science and arts and humanities tracks. Students, however, are encouraged to concentrate their coursework as much as possible to develop a particular country and language competence. Moreover, while it is required to take coursework from both the social science and the arts and humanities tracks, students should select one of these two broad areas for greater concentration, generally around one or several related disciplines. While students can take undergraduate courses as a graduate student, undergraduate coursework will not be eligible to count toward the thirty-one (31) credit hours. All thirty-one (31) credit hours must be 5000 and above.

Language: All students must satisfy the foreign language requirement for the MA degree, even if they choose to graduate with the MS degree. Students prove proficiency in Chinese, Japanese, Arabic, or some other approved language by demonstrating one of the following: 1) the completion of twelve semester hours of college level coursework in the chosen Asian language with an average grade of at least 3.0 ("B"); or 2) passage of a reading comprehension test administered by the Department of Modern Languages and Linguistics at Florida State University; 3) four years of a single language in high school; or 4) if the first language is **not** English: TOEFL or IELTS. Students, however, are encouraged to go much farther in their language training to gain an effective competency in their chosen area language.

Note: Descriptions of individual courses can be found under the departmental listings. In addition to the courses listed below, special topics courses may be approved by the program director in any particular term. These courses appear on the term course lists and are available at the International Studies Organization site as well as the program office in *211 Bellamy*.

Asian History

Minimum of six semester hours

- ASH 5266 Central Asia Since the Mongols (3)
 ASH 5409 Imperial China (3)
 INR 5936 Special Topics in International Affairs (3) [21st Century China]
 INR 5936 Special Topics in International Affairs (3) [Readings on Communist Asia]
 HIS 6934 Special Topics in History (3) [Islamic World]

Social Science Track

Minimum of six semester hours

- CPO 5407 Seminar in Comparative Government and Politics: The Middle East (3)
 CPO 5740 Comparative Political Economy (3)
 ECO 5005 Economic Principles for International Affairs (3)
 ECO 5208 Global Macroeconomics (3)*
 ECO 5305 History of Economic Thought (3)
 ECO 5707 International Trade (3)*
 ECO 5715 International Finance (3)*
 ECP 5115 Seminar in the Economies of Population (3)
 ECS 5005 Seminar in Comparative Economic Systems (3)
 ECS 5015 Economic Development: Theory and Problems (3)
 GEA 5195r Advanced Area Studies (3)
 GEO 5305 Biogeography (3)
 GEO 5358 Environmental Conflict and Economic Development (3)
 GEO 5425 Cultural Geography (3)
 GEO 5435 Global Health (3)
 GEO 5472 Political Geography (3)
 INR 5012 Problems of Globalism (3)
 INR 5036 International Political Economy (3)
 INR 5088 International Conflict (3)
 INR 5934r Selected Topics (3)
 INR 5938 Joint Seminar in International Affairs (3)
 INS 5906 Directed Individual Study (1–6)
 PAD 5310 Disaster Management Planning for Urban Poor Communities (3)
 PAD 5376 Introduction to Terrorism: Preparedness and Response (3)
 PAD 5377 Advanced Topics in Terrorism (3)
 PAD 5389 Disasters: From Shock to Recovery (3)
 PAD 5397 Foundations of Emergency Management (3)
 PAD 5835 International and Comparative Disaster Management (3)

- PAD 5873 International Terrorism Policy (3)
 PAD 5898 Global Security and Fusion (3)
 SYA 5018 Classical Social Theory (3)
 SYD 5046 International Population Dynamics (3)
 SYD 5105 Population Theory (3)
 SYD 5135 Techniques of Population Analysis (3)
 SYD 5215 Health and Survival (3)
 SYD 5225 Fertility (3)
 SYO 5306 Political Sociology (3)
 SYO 5335 Sociology of Political Economy (3)
 SYP 5105 Theories of Social Psychology (3)
 SYP 5305 Collective Behavior and Social Movements (3)
 URP 5355 International Transportation Planning (3)
 URP 5405 River Basin Planning and Management (3)
 URP 5526 Healthy Cities, Healthy Communities (3)
 URP 5544 Gender and Development (3)
 URP 5610 Introduction to Development Planning (3)
 URP 5611 Strategies for Urban and Regional Development in Less Developed Countries (3)
 URP 5615 Infrastructure and Housing in Less Developed Countries (3)
 URP 5616 Project Planning in Developing Countries (3)
 URP 5847 Growth and Development of Cities (3)

*Note: Consult with instructor and/or see course description about required prerequisites

Arts and Humanities Track

Minimum of six semester hours

- ANG 5137 Nautical Archaeology: Global View (3)
 ANG 5172 Historic Archaeology (3)
 ANG 5240 Anthropology of Religion (3)
 ANG 5242 Symbol and Ritual (3)
 ANG 5266 Economic and Ecological Approaches to Anthropology (3)
 ANG 5275 Human Conflict: Theory and Resolution (3)
 ANG 5426 Kinship and Social Organization (3)
 ANG 5471 Technology and Social Change (3)
 ANG 5478 Cultural Evolution (3)
 ANG 5737 Medical Anthropology (3)
 ARH 5556 Arts of Japan (3)
 ARH 5558 Arts of China (3)
 ARH 5575 Islamic Art and Architecture, 7th-21st Centuries (3)
 ARH 6592r Topics in Eastern Art: Seminar (3)
 CHI 5505r Readings in Chinese Literature (3)
 FOL 5934r Problems and Studies in Modern Languages and Literature (3)
 FOW 5595 Transnational Literature (3) [Sinophone and Chinese Diaspora]
 JPN 5900r Studies in Japanese Language and Literature (3)
 MUH 5555 Music of Middle East (3)
 MUH 5576 Music of Indonesia (3)
 MUH 5577 Music of Japan (3)
 RLG 5195r Seminar: Religion and Culture (3)
 RLG 5292 Tutorial in Near Eastern Languages and Literature (3)
 RLG 5305r Seminar: History of Religions (3)
 RLG 5318 Tutorial in Classical Chinese Religious Texts (3)
 RLG 5332 Modern Hinduism (3)
 RLG 5354r Special Topics in Asian Religions (3)
 RLG 5356 Readings in Tibetan Religious Texts (3)
 RLG 5910r Tutorial in Pali (1–3)
 RLG 5915r Tutorial in Sanskrit Texts (1–3)

Note: Each of the participating departments periodically offers courses in selected or special topics, or as directed individual studies, which allows a student the opportunity for greater concentration in selected areas of specialization relevant to his or her country focus.

Definition of Prefix

ASH—Asian History

ASN—Asian Studies

Graduate Courses

ASH 5409. Imperial China (3). This course familiarizes students with the history of Imperial China, examining China's dynasties and discussing the political, cultural, social, religious, ideological, and economic developments that characterized each period.

ASN 5910r. Supervised Research (1–5). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

ASN 5935r. Special Topics in Asian Studies (1–3). May be repeated to a maximum of nine semester hours as topics change. Duplicate registration allowed within the same term.

ASN 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours credit is required. May be repeated to a maximum of six semester hours.

ASN 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

ASN 8976r. Master's Thesis Defense (0). (P/F grade only.)

ASTRONOMY:
see Physics

BIOCHEMISTRY:
see Biological Science; Chemistry and Biochemistry

Graduate Department of BIOLOGICAL SCIENCE

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.bio.fsu.edu/>

Chair: Thomas A. Houpt; **Associate Chair (Graduate Studies):** Nora Underwood; **Associate Chair (Undergraduate Studies):** Karen M. McGinnis; **Associate Chair (Academic Programs):** Alice A. Winn; **Professors:** Bass, Chase, Ellington, Erickson, D. Fadool, Fajer, Gilbert, Houle, Houpt, Hughes, Inouye, Levitan, Mast, Meredith, Miller, Steppan, Tang, Taylor, Terebelski, Travis, Underwood; **Associate Professors:** Chadwick, Cui, Dennis, DuVal, J. Fadool, Jones, T. Keller, Lemmon, Lenhart, Lyons, McGinnis, Rokyta, Stroupe, Trombley, Winn, Wulff, Yu, Zhu; **Assistant Professors:** Bangi, Burgess, Cortez, Feng, McCoy, Okamoto, Rassweiler, Storace, Vincis, Yin; **Professors Emeriti:** Abele, Anderson, Caspar, DeBusk, deKloet, Elam, Epstein, Gaffney, Heard, Herrnkind, Hofer, Homann, James, Livingston, Mariscal, Outlaw, Quadagno, Reeves, Roberts, Roeder, Roux, Tschinkel

The program of graduate study in the Department of Biological Science is designed to transform an individual from student to professional scholar. Awarding of the degree signifies that the individual is qualified to join the community of scholars and is recognized as an authority in the discipline. Our graduates are employed as faculty in colleges and universities, as researchers in industry or government laboratories, or instructors of science education.

The Department of Biological Science offers graduate programs leading to the degree of Master of Science (MS) or Doctor of Philosophy (PhD). There are strong graduate research programs in both experimental and theoretical biology. Research training expertise is available in biophysics and molecular biology; cell biology; biochemical and molecular genetics; ecology; evolution; developmental biology; microbiology; virology; immunology; neurobiology; plant and animal physiology; comparative physiology; endocrinology; sensory physiology; population biology/genetics; marine biology; plant and animal systematics; tropical biology; and conservation biology. Some departmental programs are associated with research and graduate programs of the departments of Oceanography, Chemistry and Biochemistry, and Psychology, as well as with the Biomedical Sciences division of the College of Medicine. The department faculty are members of advanced-study programs such as the Institute of Molecular Biophysics Program, as well as and the Program in Neuroscience, which provide interdisciplinary training in the use of molecular, physiological, and neuroethological methods in the study of nervous system function and disease. There is also a special federal training program in the chemical senses that supports PhD and postdoctoral level training in the field of olfaction and taste.

Fully equipped research laboratories and classrooms for biological science are located in five buildings on the Tallahassee campus (King Life Sciences Building, Biological Science Unit 1, Biomedical Research Facility, Molecular Biophysics, and Milton Carothers Hall) and at the Florida State University Coastal and Marine Laboratory, forty-five miles south of Tallahassee. A modern imaging center includes both state-of-the-art light and electron microscopes. Students have access to molecular biology facilities, including a DNA microarrayer, special culture facilities, a hybridoma laboratory, greenhouses, machine and electronics shops, animal vivaria, ultracentrifuges, cold laboratories, analyzer laboratories, sterile laboratories, shielded electrophysiological laboratories, an isotope laboratory, photographic laboratories, and spectrophotometric instrumentation, as well as the National High Magnetic Field Laboratory and a supercomputer. Herbarium facilities contain about 175,000 specimens. Vans, cars, and boats are provided for field research.

The Department of Biological Science is a comprehensive basic science department consisting of forty-four faculty members. The current faculty members hold contracts and grants totaling forty-four million dollars (2009–2014). Faculty members are represented on the editorial boards of numerous professional journals and hold a number of national offices in professional societies. Five current members of the faculty are Fellows of the American Academy of Sciences and three former faculty members are Fellows of the National Academy of Sciences. Many others serve on governmental task forces and national advisory boards of research institutions and public and private foundations.

Admission Requirements

Application for admission is to be submitted online to the Office of Admissions at <https://admissions.fsu.edu/gradapp/>. The Biological Science application deadline and submission of all supporting documents is December 1 for Fall admission. A separate application window is used for Fall and Spring admissions for applicants interested in the course-based MS program. All applicants will meet the minimum criteria of a 3.0 undergraduate upper division grade point average (GPA); GRE scores [the average entering graduate student

has a verbal score of 157 on the GRE, 77%, and a quantitative score of 157 on the GRE, 77%; applicants with GRE scores below 153 verbal and 146 quantitative need to have strong research backgrounds, a GPA of 3.2 or better on upper division courses, and excellent letters of recommendation]; three current letters of recommendation from individuals who are able to assess the applicant's academic and research potential; a one to three page statement on research interest; and official transcripts. Foreign students, in addition to the above, must also score a minimum of 600 on the paper-based, 250 on the computer-based, or 92 on the Internet-based Test of English as a Foreign Language (TOEFL). Applicants are required to advise the associate chair of their area(s) of interest so that applications can be circulated to the appropriate faculty members. Students are **strongly** encouraged to contact individual faculty about the details of their research activities.

Financial Aid for Doctoral and Thesis-Based Master's Program

Graduate assistantships (teaching, research, and/or service) are available at approximately \$21,239 (master's) to \$22,143 (doctorate) per calendar year; up to twenty hours per week are required for instruction and related duties. Research assistantships involve working on the research program of an individual faculty member with whom the applicant should correspond directly. Matriculation and out-of-state tuition waivers are available, subject to availability of funds, for graduate assistants who hold a minimum appointment of a quarter-time.

Degree Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Doctoral Degree

The direction and supervision of graduate work at the doctoral level resides primarily with the major professor and supervisory committee. The University requires that the degree be completed within five calendar years from the time the student gains admittance to candidacy by passing the preliminary exam.

Overall requirements for the Doctor of Philosophy (PhD) degree are as follows:

1. After admission to doctoral candidacy, a minimum of twenty-four semester hours of dissertation credit is required
2. Teaching requirement: teaching experience in at least two different courses recommended by the supervisory committee and approved by the associate chair
3. Seminar requirement: three presentations, excluding the dissertation defense. Students are encouraged to give presentations at national and/or regional meetings. For further details, contact the department
4. Submission and approval of a doctoral proposal by major professor, supervisory committee, and associate chair
5. Successful completion of the preliminary doctoral examination
6. Submission of an acceptable dissertation
7. Successful defense of the dissertation

Master's Degree

Requirements for Research-Based Master of Science (MS) Degree

The requirements of the research-based Master of Science (MS) degree should be met in two to three years and include the following:

1. At least thirty semester hours of graduate credit (5000-level and above courses including a minimum of six semester hours of thesis credit), eighteen semester hours of which must bear letter grades (not "S" or "U")
2. Teaching requirement: Teaching experience in at least one course recommended by the supervisory committee and approved by the associate chair
3. Seminar requirement: One departmental presentation, excluding the formal presentation of the thesis research. MS students are encouraged to give presentations at national and/or regional meetings. For further details, contact the department
4. Submission of a master's prospectus, and approval by the major professor, supervisory committee, and associate chair
5. Submission of an acceptable thesis
6. Successful defense of the thesis

Requirements for Course-Based Master of Science (MS) Degree

The requirements of the course-based Master of Science (MS) degree can generally be completed within eighteen months to two years and include the following:

1. At least thirty-two semester hours of graduate credit (5000-level and above courses), twenty-one semester hours of which must bear letter grades (not "S" or "U")
2. Comprehensive Examination: The student must pass a written comprehensive examination to be administered by the student's Supervisory Committee. The student must have a 3.0 or greater grade point average to be eligible to take the comprehensive examination
3. Directed Individual Study (DIS) requirement: The student must submit a written report upon completion of two semesters of individual study using a literary- or laboratory-based research approach

For additional information, see <https://www.bio.fsu.edu/grad/>.

Interdisciplinary Program in Neuroscience

Director: Frank Johnson

The Program in Neuroscience provides interdisciplinary training leading to the degree of PhD in Neuroscience. Participating faculty members hold appointments in the Departments of Biological Science, Psychology, Mathematics, or Biomedical Sciences. Students enroll in the department of their initial faculty advisor/major professor but may take neuroscience courses offered by any of the participating departments. Several of the biological science faculty are members of the Program in Neuroscience.

Neuroscience courses offered through the Department of Biological Science include those with a PSB or PCB prefix. Interdisciplinary research training is available involving molecular, biophysical, cellular, physiological, and behavioral approaches. Common areas of research include sensory biology (with special emphasis on chemical senses), neural plasticity and development, neural control of food intake, synaptic physiology, genetics of behavior, neuroendocrinology, circadian rhythms, and neurological aspects of stress and drug addiction. The program has an NIH-funded training grant, in addition to other mechanisms for student support, and provides numerous colloquia, symposia, and special courses in areas of particularly active or rapidly developing research. Out-of-state and matriculation waivers for neuroscience students in biological science are available on the same basis as for the rest of the department. For more information, see the separate entry for Neuroscience in this *Graduate Bulletin* and the Program in Neuroscience Web site at <http://neuro.fsu.edu>.

Definition of Prefixes

BCH—Biochemistry (Biophysics)

BOT—Botany

BSC—Biological Sciences

MCB—Microbiology

PCB—Process Biology

PSB—Psychobiology

ZOO—Zoology

Advanced Undergraduate Courses

Please refer to the *General Bulletin* for full course descriptions.

BSC 4613. Systematics (3).

BOT 4394. Plant Molecular Biology (3).

MCB 4403L. Prokaryotic Biology Laboratory (2).

PCB 4024L. Molecular Biology Laboratory (1).

PCB 4233. Immunology (3).

PCB 4233L. Laboratory in Immunology (1).

PCB 4253. Animal Development (3).

PCB 4253L. Animal Development Laboratory (3).

PCB 4723. General and Comparative Animal Physiology (3).

PCB 4843. Fundamentals of Neuroscience (3).

ZOO 4204C. Biology of Higher Marine Invertebrates (5).

ZOO 4343C. Biology of the Lower Vertebrates (4).

ZOO 4353C. Biology of the Higher Vertebrates (4).

ZOO 4513. Animal Behavior (4).

ZOO 4753C. Histology (4).

ZOO 4823. Insect Biology (3).

ZOO 4823L. Insect Diversity of North Florida (2).

Graduate Courses

Biochemistry

BCH 5886r. Special Topics in Biochemistry and Cell Biology (1–3). Prerequisite: Completion of introductory biochemistry courses. May be repeated up to a maximum of four times or to a maximum of twelve semester hours within the same term.

BCH 5887r. Special Topics in Biochemistry and Cell Biology (1–3). Prerequisite: Completion of introductory biochemistry courses. May be repeated to a maximum of four times or to a maximum of twelve semester hours.

Botany

BOT 5505. Plant Physiology (3). Prerequisites: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, BSC 3016, CHM 1045, and CHM 1045L. This course provides students with a comprehensive overview of plant physiology. Plant physiology is the study of plant processes, structure and function. Physiology describes the mechanisms used by living organisms to solve problems they encounter as they grow and develop. Plants are unique, as sessile, photoautotrophic organisms, and diverse. As such, plants provide the opportunity to study many interesting physiological topics and mechanisms.

BOT 5938r. Selected Topics in Botany (1–4). May be repeated to a maximum of sixteen semester hours.

BOT 6936r. Seminar in Botany (2). (S/U grade only). May be repeated to a maximum of eight semester hours.

Biological Science

BSC 5476C. Introduction to Scientific Diving (3). Prerequisites: Open water diver certified by national organization, clear diving medical exam, and ability to pass swimming exam. This course is designed for the graduate student who plans to use SCUBA diving as a tool for underwater research. Skills covered include dive planning, emergency management, underwater navigation, survey techniques, and instrument deployment and recovery. Students learn to plan and lead scientific expeditions in any environment, and to write proposals that effectively outline using diving as a tool in research.

BSC 5900r. Directed Individual Study (1–12). (S/U grade only).

BSC 5932r. Graduate Tutorial in Biological Science (1). (S/U grade only). Prerequisite: Graduate standing. This course involves selected topics in contemporary biological science along with reading and analysis of primary literature. May be repeated to a maximum of fifteen semester hours within the same term.

BSC 5936r. Selected Topics in Biological Science (1–4). May be repeated to a maximum of sixteen semester hours within the same term.

BSC 5945r. Supervised Teaching (1–2). (S/U grade only). May be repeated to a maximum of five semester hours.

BSC 5971r. Thesis (1–6). (S/U grade only). After a graduate student meets minimum requirements and is working on thesis research, registration for Thesis is required. A minimum of six semester hours of credit must be earned.

BSC 6921r. Colloquium in Biological Science (1). (S/U grade only). This course is required of all graduate students throughout their residence. May be repeated to a maximum of twenty semester hours.

BSC 6980r. Dissertation (1–12). (S/U grade only). Prerequisite: Admission to doctoral candidacy. For this course, the student must register for a minimum of two dissertation research hours each term until graduation. A minimum of twenty-four semester hours of credit must be earned.

BSC 8964r. Preliminary Doctoral Examination (0). (P/F grade only.) A comprehensive examination. Students with a master's degree should take it during the second semester in residence; those without a master's degree should take it during the fourth semester in residence. Passing exam required for admission to doctoral candidacy.

BSC 8976. Master's Thesis Defense (0). (P/F grade only.) This is the oral defense of master's research and thesis. Students should register during the term in which they intend to defend their master's thesis.

BSC 8985r. Dissertation Defense (0). (P/F grade only.) This is the oral defense of dissertation research. One-time registration during the term in which student expects to defend.

Microbiology

MCB 5408. Prokaryotic Biology (3). Prerequisite: PCB 3063 or instructor permission. This course introduces graduate level general microbiology, including material on prokaryotic cell structure and function, the molecular biology and genetics of microorganisms including viruses, and biotechnological applications of microbial physiology.

MCB 5505. Virology (3). This course covers structure and replication of the bacteriophage, plant and animal viruses, with an emphasis on comparative molecular biology and infectious disease.

Process Biology

PCB 5029C. Intensive Modern Molecular Biology (4). Prerequisites: PCB 3063 and PCB 4024. This course teaches modern molecular biology methods in a cohesive single project. Working with a single gene, students design overexpressing clones to be transfected into human cells. Additionally, using CRISPR gene editing, students knock that gene out of cells. RNA is isolated from each experiment and full transcriptomes are sequenced and analyzed.

PCB 5137. Advanced Cell Biology (3). This course focuses on topics such as: principles of cell organization; membrane structure and transport; cytoskeleton; signaling; organelle structure and function; energy metabolism; cellular aspects of cancer and immunity.

PCB 5366. Ecophysiology (3). In this course, linking physiological responses to ecology enables students to understand environmental drivers of ecology at every scale: from population ecology, community dynamics, and conservation, to stress response in plants, animals, and humans. This course provides context for environmental, agricultural, and biomedical examples of ecophysiology.

PCB 5425. Population Ecology (3). This course studies the theory of population growth and regulation, demographic theory and analytical methods, life history variation and evolution.

PCB 5447. Community Ecology (3). Prerequisites: General ecology and statistics. This course introduces students to community concepts; species richness models; matrices and communities; competition and species packing; predation and dominance.

PCB 5525. Molecular Biology (3). Prerequisite: PCB 3063 or equivalent or instructor permission. This course introduces students to molecular biology and molecular genetics. The emphasis is on the activities of DNA, RNA, regulation of gene expression, gene cloning, bioinformatics, and biotechnology.

PCB 5595. Advanced Molecular Biology (3). Prerequisites: PCB 4024 or PCB 5525 or instructor permission. This course studies gene regulation and its relationship to differentiation and development.

PCB 5615. Ecological Genetics (3). Prerequisites: PCB 3063. This course covers the fundamentals of modern ecological genetics. The course begins with an overview of genetic variation, its measurement, and the forces responsible for the origin and maintenance of variation within and among populations. The remainder of the course describes the ecological context of evolution, and the ecological and evolutionary forces that shape variation within and between populations. Emphasis is placed on experimental studies of natural populations, and the relationship between theory and experiments. Several advanced topics are covered in the second part of the course: life-history evolution, sexual selection, applied ecological genetics, and molecular evolution.

PCB 5672. Evolution (3). Prerequisites: PCB 3063 or equivalent undergraduate coursework. This course provides instruction in evolution as a unifying framework for biological science. The course shows how two primary aspects of evolution, shared phylogenetic history and the modification of populations and species, interact to produce the similarities and differences among all organisms.

PCB 5675. Advanced Evolutionary Biology (3). Prerequisites: PCB 3063 or PCB 4674 or equivalent or instructor permission. This course focuses on topics such as population genetics, quantitative genetics, and optimality approaches to the study of evolution. Emphasis is on basic theory and how this relates to empirical applications.

PCB 5682. Macroevolution (3). This course focuses on the conceptual foundations as well as providing practical experience in many commonly used methods. Topics include phylogenetics and systematics, the comparative method, reconstructing the past, biogeography, testing adaptation, quantifying diversification, and connections with microevolution and speciation.

PCB 5786. Membrane Biophysics (3). This course attempts to merge classical principles and analyses of membrane biophysics with that of current focal areas of physiological research in order to best prepare an analytically-minded student for today's scientific applications.

PCB 5795. Sensory Physiology (3). Prerequisite: General physiology/cell biology background. This course focuses on topics such as mechanisms of sensory transduction; higher level processing of sensory information; comparative aspects of sensory physiology.

PCB 5845. Cell and Molecular Neuroscience (4). This course introduces students to basic principles of neurophysiology, including intracellular signaling, membrane potentials, synaptic communication, sensory and motor systems and neural development and plasticity.

PCB 5936r. Selected Topics in Genetics and Cell Biology (1–4). May be repeated to a maximum of sixteen semester hours.

PCB 5938r. Selected Topics in Ecology and Evolutionary Biology (1–4). May be repeated to a maximum of sixteen semester hours in the same term.

PCB 6936r. Seminar in Genetics and Cell Biology (2). (S/U grade only). May be repeated to a maximum of eight semester hours.

PCB 6938r. Seminar in Ecology and Evolutionary Biology (2). (S/U grade only). May be repeated to a maximum of eight semester hours in the same term.

Neuroscience

PSB 5057. Neuroscience Methods: Molecules to Behavior (2). (S/U grade only). This course exposes graduate students to a broad array of current techniques and methodologies in the neurosciences from a molecular to behavioral level of analysis.

PSB 5077. Responsible Conduct of Research (2). (S/U grade only). This course is an introduction to survival skills and ethics in scientific research. The focus is on basic principles of scientific conduct and practice for graduate students pursuing careers in biomedical research.

PSB 5341. Systems and Behavioral Neuroscience (4). This course covers integrated neural systems that ultimately lead to the behavior of organisms. Topics include fluid and energy balance, reproduction, sleep, emotions, cognition and neurological disorders.

PSB 6070r. Molecular Neuropharmacology (3). This course provides an in-depth description of basic principles in pharmacology and the cellular and molecular bases of drug effects in the central nervous system.

PSB 6070r. Current Problems in Neuroscience (2). (S/U grade only). This course is a detailed examination of a current area of neuroscience research. May be repeated to a maximum of eight semester hours.

PSB 6920r. Neuroscience Colloquium (1). (S/U grade only). This course consists of lectures and discussions on research in neuroscience. May be repeated to a maximum of four semester hours.

PSB 6933r. Seminar in Neuroscience (1-2). (S/U grade only). This course provides a research-oriented seminar for graduate students in neuroscience. Content includes a wide variety of current topics in nervous system research. May be repeated to a maximum of eight semester hours.

Zoology

ZOO 5935r. Selected Topics in Zoology (1-4). May be repeated to maximum of sixteen semester hours.

BIOMEDICAL MATHEMATICS:
see Mathematics

BOTANY:
see Biological Science

CELL BIOLOGY:
see Biological Science

Graduate Department of BIOMEDICAL SCIENCES

COLLEGE OF MEDICINE

Website: <https://med.fsu.edu/biosci/home>

Chair: Richard Nowakowski; **Professors:** Blaber, Delp, Diaz, Galasko, Hajcak, Hurt, Joyce, Kabbaj, Laywell, Levenson, Nowakowski, Olcese, Overton, Ren, Stefanovic, Suo, Y. Wang; **Associate Professors:** Arbeitman, Bienkiewicz, Gunjan, Horabin, Kumar, Leadem, C. Lee, Meckes, Megraw, Pinto, Stanwood, Zhou; **Assistant Professors:** Irianto, Rizkallah, Tomko, Y. Wang, Y. Wang; **Eminent Scholar:** Bhide; **Research Faculty I:** Duclot, Graham, Kao, Nemece, Pritchard, Rodriguez, Zhang; **Research Faculty II:** McCarthy, X. Wang, Zorio; **Assistants in Medicine:** Bradley, Connolly, Wu; **Associates in Research:** Foster, Vied, Y. Yang; **Senior Research Associate:** Didier, Mercer

The Department of Biomedical Sciences is a community of scholars dedicated to educating future physicians and scientists and advancing knowledge through discovery.

The PhD in Biomedical Sciences at the Florida State University College of Medicine is designed to train modern biomedical scientists who use genomics, proteomics, bioinformatics, and other contemporary approaches to address questions of developmental, cell, and molecular biology related to human health. The program is appropriate for students with majors in biochemistry, biology, or other health-related fields. We educate graduate students in scholarly, interdisciplinary approaches to conducting research from the molecular basis to systems-level approaches for the study of human disease, as well as the function of the human genome in aging, development, neuropathology, cancer, and other diseases. Research rotations during the first year allow students to make an informed choice regarding the research area and major professor with whom they will conduct their PhD work. A core curriculum of the fundamentals, the choice of electives from other departments, and intellectual interaction with faculty and postdoctoral fellows encourage graduate students to mature into independent scientists.

Admission Requirements

To apply for the PhD in Biomedical Sciences Program, students should contact the College of Medicine's Office of Research and Graduate Programs at (850) 645-6420 or visit the program's Web site (<https://med.fsu.edu/phd/home>) for other contact information. A prospective candidate must 1) have or be a candidate for a baccalaureate degree from an accredited college or university and be in good standing at the last institution attended, 2) have a minimum GPA of 3.0 (on a 4.0 scale), and 3) submit Graduate Record Examinations (GRE) scores. Applicants whose native language is not English and who have not received a degree from an English language institution are required to take the Test of English as a Foreign Language (TOEFL), receiving a minimum score of 80 on the Internet based (IB) test or 550 for the paper test. Special admission consideration may be requested for students with disabilities. Applicants must also send all required material to the University Admission Office at <https://admissions.fsu.edu/gradapp/>.

Degree Requirements

The College of Medicine grants the PhD in Biomedical Sciences through an interdisciplinary program with the goal of training students to conduct research in the broad area of the molecular basis of human disease, including the function of the human genome in development, neurobiology, aging, cancer, and other diseases.

The curriculum for the Biomedical Sciences degree includes specialized biomedical coursework, laboratory research, and courses in biostatistics and ethics in research. The direction and supervision of graduate work at the doctoral level resides primarily with the major professor and supervisory committee, which is typically comprised of four faculty members. Laboratory rotation in at least three laboratories during the first year is a degree requirement, designed to assist students in making informed choices regarding their courses of study.

To be considered for graduation from the College of Medicine with the PhD in Biomedical Sciences, the student must successfully complete all course requirements within five calendar years from the time the student gains admittance to candidacy by passing the preliminary exam. Other requirements for graduation include attending the Health Science Seminar Series; successfully completing the preliminary doctoral examination; submitting a doctoral research proposal approved by the major professor and the supervisory committee after admission to doctoral candidacy; registering for a minimum of twenty-four semester hours of dissertation credit; and submitting, publicly presenting, and successfully defending a doctoral dissertation.

Additional details are available at <https://med.fsu.edu/phd/home>. Also, for complete details of degree requirements, plus a description of the college, its facilities, opportunities, and available financial assistance, refer to the "College of Medicine" chapter of this *Graduate Bulletin*.

Other Graduate Programs Related to Biomedical Sciences

Neuroscience

The Program in Neuroscience is an independent research and graduate training program which includes faculty from the departments of Biological Science, Biomedical Sciences, Mathematics, and Psychology. Its objective is to promote interdisciplinary basic research into neural processes, including the biological mechanisms underlying behavior, and to provide advanced graduate training leading to the PhD degree in Neuroscience.

Molecular Biophysics

The Molecular Biophysics Graduate Program (MOB) at FSU is an interdisciplinary program that unites nine departments and institutes (Biological Science; Biomedical Sciences; Chemical and Biomedical Engineering; Chemistry and Biochemistry; Computational Sciences; Materials Research and Technology; Mathematics; Physics; and Nutrition, Food and Exercise Sciences) across four Colleges (Arts and Sciences, Engineering, Human Sciences, and Medicine). The MOB program provides graduate training for a small number of highly motivated biology, physics, engineering, and chemistry students who are eager to take advantage of the interdisciplinary research environment provided by the Institute of Molecular Biophysics. The mission is to train students at all levels in a multi-disciplinary environment with the primary unifying theme being the use of biophysical, biochemical, and computational tools to study macromolecules and their assemblies.

Definition of Prefixes

BMS—Basic Medical Sciences

ENT—Entrepreneurship

GMS—Graduate Medical Sciences

IHS—Interdisciplinary Health Sciences

PSB—Psychobiology

Graduate Courses

BMS 5081. Introduction to Clinical Ethics (2). This course explores the relationship between the respective views of moral significance, fundamental moral notions, and the resulting moral principles of several prominent ethical theories. The course discusses the relevance of these theories to the two primary ethical guidelines for clinicians: respect for autonomy and beneficence. Particular topics of ethical significance relevant to physicians in clinical practice, including the nature of the physician-patient relationship, shared decision making and informed consent, decision-making capacity, decisions by proxy/surrogate, advanced directives and DNARs, and end-of-life medical care are discussed.

BMS 5082. Ethics in the Clinical Setting (4–6). Prerequisite: BMS 5081. This course covers issues relevant to end-of-life care, offers a survey of the various forms of limited consciousness/interaction, and addresses issues involving the physician-patient relationship, issues related to healthcare delivery, as well as ethical issues relevant to specific medical specialties.

BMS 5122. Insights into Human Congenital and Development Disorders (3). Prerequisite: PCB 5595 or BMS 5525. This course is an advanced biomedical sciences course for graduate students to introduce the molecular basis of human congenital and developmental disorders. This course consists of three topics which cover genomic instability and cancer development, stem cells and their application in disease treatment, and neurodevelopmental disorders.

BMS 5185r. Research Opportunities in Biomedical Sciences (1–4). (S/U grade only). Prerequisite: Admission to the Biomedical Sciences graduate program. This course provides entering students in the PhD Program in Biomedical Sciences opportunities to be informed of and receive training in research by rotating through the laboratories of several individual faculty members in the department. Students must complete three laboratory rotations. Students should register for two semester hours of credit for each seven week rotation. May be repeated to a maximum of eight semester hours.

BMS 5186C. Research Techniques in Biomedical Sciences (2–4). Prerequisites: BMS 5525, PCB 5137, and PCB 5595. This is an advanced laboratory course for students in the PhD Program in Biomedical Sciences, providing training in laboratory techniques and experimental approaches essential to contemporary molecular biology and biochemistry research.

BMS 5525. Bioregulation (4). Prerequisite: PCB 5595. This course is an advanced, lecture-based course emphasizing the molecular basis of regulation in biological systems. An important component is the study of the design and interpretation of experiments leading to understanding of regulation of gene expression. The course relies on contemporary research literature and focuses on specific model organisms and current problems that illustrate experimental approaches used to investigate different aspects of the control of gene expression.

BMS 5905r. Directed Independent Study in Biomedical Sciences (1–12). (S/U grade only). Prerequisite: Admission to the Biomedical Sciences graduate program. This is an individualized research course intended for students in the PhD Program in Biomedical Sciences prior to passing the Preliminary Doctoral Examination. May be repeated to a maximum of fifty-four semester hours.

BMS 5931. Graduate Tutorial in Biomedical Sciences (1). (S/U grade only). This course involves selected topics in contemporary Biomedical Sciences along with reading and analysis of primary literature. May be repeated for a total of fifteen semester hours within the same term. Topics to be covered will address questions of developmental, cell and molecular biology related to human health.

BMS 5935r. Advanced Topics in Biomedical Sciences (1–2). (S/U grade only). Prerequisite: Admission to the Biomedical Sciences graduate program. This is a seminar-based course in which students in the PhD Program in Biomedical Sciences present seminars on current research from the literature on topics developed under the guidance of faculty members. Students critically read, analyze, and present current research. May be repeated to a maximum of eight semester hours.

BMS 6900r. Directed Individual Study in Biomedical and Clinical Sciences (2–9). (S/U grade only). This course involves supervised individual study on selected topics. May be repeated to a maximum of eighteen semester hours.

BMS 6936r. Seminar in Biomedical Sciences (1–2). (S/U grade only). This course is a seminar series in current topics in biomedical sciences. May be repeated to a maximum of sixteen semester hours.

ENT 5626. Biomedical Entrepreneurism (3). This course is an advanced biomedical sciences course for graduate students and post-doctoral fellows to introduce the concepts of taking a scientific finding and creating a business model for healthcare advancements in one of the following areas: pharmaceuticals, medical devices or laboratory services.

GMS 5095r. Modeling Human Disease (3). This is an advanced biomedical sciences course for PhD students or for upper-level undergraduate students. This course involves lectures and student-driven presentation and discussion. Students learn how to critically evaluate the scientific literature, and how to use model systems for experimental research. May be repeated to a maximum of six semester hours.

GMS 5098. Critical Review of the Scientific Literature (1–2). (S/U grade only). This course is an advanced biomedical sciences course for PhD students. This course revolves around student-driven presentations and discussions of the primary research literature. Students learn how to evaluate the scientific literature in their own field. Issues such as authorship, funding sources, citation index, journal quality, etc. are introduced as criteria for judgment.

GMS 5222r. Chromatin Structure, Epigenetics and Human Health (3). Prerequisites: PCB 5595, PCB 5137 or BMS 5525. This course is an advanced biomedical sciences course for graduate students to introduce the recent developments in chromatin and epigenetics research in the context of human health. The course involves lectures and student-driven presentation and discussion. May be repeated to a maximum of six semester hours.

GMS 5303. Molecular Mechanism of Common Human Diseases (3). This course introduces modern biomedical research to the graduate students. The students gain general knowledge of the most common human diseases and their molecular pathology. In addition, the attempts to find the cure and the challenges that lay ahead are discussed.

GMS 5304. RNA Silencing and Disease (3). This course explores mechanisms of RNA silencing by the different classes of small RNAs. Topics discussed include how small RNAs are generated, the proteins involved, how small RNAs regulate chromatin formation, gene expression and how they are involved in cancer and disease.

GMS 6001r. Special Topics in Biomedical Sciences (1–3). (S/U grade only). This course focuses on recent advances and outlooks in biomedical sciences research. Course offerings include but are not limited to such topics as aging, biotechnology, bioinformatics, developmental biology, genomics and proteomics, molecular signaling, neuroscience, and physiology. The general emphasis is on the molecular, genetic and cell biology aspects of these topics. May be repeated to a maximum of sixteen semester hours.

GMS 6097Cr. Biomedical Sciences Research (3). This laboratory course is designed to provide students with individualized instruction in specific experimental strategies and methods important to their chosen specialty area of biomedical research training. May be repeated to a maximum of twelve semester hours.

GMS 6955. Presentation Skills in Biomedical Sciences (3) (S/U grade only). Prerequisite: Admission to a graduate program at Florida State University. This is a seminar-based course in which graduate students present multiple short seminars on current research on topics developed under the guidance of faculty members. Students develop strong presentation skills while presenting their scientific work to various audiences.

IHS 5503r. Proposal Development (1). (S/U grade only). This course is individualized instruction for graduate students in the College of Medicine in the development of a dissertation proposal or other proposals, including the strategies, process and requirements that meet the standards for written project proposals in medical research. May be repeated to a maximum of two semester hours.

IHS 5515. Ethics and Professional Integrity in Research (1). (S/U grade only). This is a required course for students in the PhD Program in Biomedical Sciences. This course provides a survey of three broad areas of research ethics: issues raised by using animals in research, using people in research, and by the scientific method itself. The course presents examples of ethical decisions faced in medical research, including ascribing credit for contributions in publications, consequences of plagiarism and fraudulent data, access to genetic data, confidentiality, institutional review boards and considerations in research involving animal or human subjects.

IHS 5905r. Directed Individual Study in Health Sciences (1-12). (S/U grade only). This is a course for graduate students who desire an individualized research experience in Biomedical Sciences, Medical Humanities and Social Sciences, Public Health or other fields represented in the College of Medicine. Students receive laboratory or other training in research methods and improve their readiness for and appreciation of research in health-related science. May be repeated to a maximum of thirty-six semester hours.

IHS 5906r. Directed Individual Study in Medical Sciences (1-12). (S/U grade only). This is a course for medical students who desire an individualized research experience in Biomedical Sciences, Medical Humanities and Social Sciences, Public Health or other fields represented in the College of Medicine. Students receive laboratory or other training in research methods and improve their readiness for and appreciation of independent research in health-related science. May be repeated to a maximum of twenty-four semester hours.

IHS 5933. Seminar on Medical Science Education (1). (S/U grade only). This seminar is preparation for supervised teaching and education outreach experiences. Topics include approaches to conduct of classes and laboratories, exam construction, ethics in teaching, legal and safety issues for instructors, and effective written and oral communication.

IHS 5935r. Health Sciences Seminar (1). (S/U grade only). This is a seminar program for students in the PhD Program in Biomedical Sciences and other health-related programs. Biomedical Sciences students are required to enroll each Fall and Spring semester. May be repeated to a maximum of twelve semester hours.

IHS 5945r. Supervised Teaching (1-5). (S/U grade only). For this course, students in the PhD Program in Biomedical Sciences are required to register for a minimum of two semester hours before graduation. May be repeated to a maximum of five semester hours.

IHS 6980r. Dissertation Research (1-12). (S/U grade only). PhD candidates in Biomedical Sciences should register for this course after passing the Preliminary Examination. A minimum of twenty-four dissertation hours is required for graduation.

IHS 8960r. Preliminary Doctoral Examination (0). (P/F grade only.) This course is an oral examination and defense of the doctoral proposal; successful completion allows advancement of the student to PhD candidacy.

IHS 8970r. Dissertation Defense (0). (P/F grade only.) This course is the oral defense of dissertation research. One-time registration during the term in which the student expects to defend their PhD dissertation.

PSB 5347. Molecular Neuropharmacology (3). This course provides an in-depth description of basic principles in pharmacology and the cellular and molecular bases of drug effects in the central nervous system.

Graduate Department of BUSINESS ANALYTICS, INFORMATION SYSTEMS AND SUPPLY CHAIN

COLLEGE OF BUSINESS

Website: <https://business.fsu.edu/departments/baissa>

Chair: Ashley Bush; **Professors:** Brusco, Bush, Cradit, Giunipero; **Associate Professors:** D. Armstrong, Tang; **Assistant Professors:** Choi, Ilk, Lu, Shang; **Teaching Faculty III:** Larsen; **Teaching Faculty II:** K. Armstrong; **Teaching Faculty I:** Kerwin, Sun; **Bank of America Professor of Data Analytics:** Cradit; **Print Professor of Management Information Systems:** Bush; **Synovus Professor of Business Administration:** Brusco

The Department of Business Analytics, Information Systems and Supply Chain has a diversified faculty with a wide field of teaching and research specialties at the graduate level. These research areas include business analytics, management information systems, operations research, and supply chain.

The graduate mission of the department is to provide education at both the master's and doctoral level and to stimulate and carry out research resulting in scholarly publications. At the master's level, this teaching and research reflects a strongly applied focus with examination of the practices of various companies and other organizations. At the doctoral level, the focus is more analytical with emphasis on theory development and testing.

For additional information related to graduate Business Analytics and Management Information Systems programs, contact the *Graduate Office, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110*, or e-mail gradprograms@business.fsu.edu.

Doctoral Degree

The college offers a Doctor of Philosophy (PhD) in business administration. The Business Analytics, Information Systems and Supply Chain department offers one concentration in the PhD program: management information systems. The PhD program prepares students for teaching and research at the university level.

Graduates have been placed at universities throughout the United States, including University of Georgia, Texas A&M, Northern Michigan University, Wake Forest University, Washington State University, and Washington and Lee University.

Master of Science Degree in Business Analytics

The Master of Science Degree Program in Business Analytics (MS-BA) was developed to address the need for specialized training in business analytics. The purpose of the Business Analytics master's program is to develop students' in-depth skills in analyzing large datasets and making strategic business recommendations based on this analysis. With approval on an individual basis, other graduate students in the College of Business may take specific electives in the MS-BA program.

The Master of Science in Business Analytics (MS-BA) is a full-time, on-campus program. Students must complete thirty-three semester hours. The program is designed so that students can complete the degree in three semesters. Entry into the program occurs in the Summer semester. Deadlines for receipt of all application materials is March 1 for Summer.

Master of Science Degree in Management Information Systems

The Master of Science Degree Program in Management Information Systems (MS in MIS) was formed to increase the emphasis on technological education in the business curriculum. The purpose of the MIS master's program is to update the skills of working MIS professionals and has a managerial focus. With approval on an individual basis, other graduate students in the College of Business may take specific electives in the MS in MIS program.

The Master of Science in Management Information Systems (MS in MIS) is an online program only. Students must complete thirty-three semester hours. The program is designed so that students can complete the degree in twenty-four months by taking two online courses each semester. Entry into the program occurs in the Fall, Spring, and Summer semesters. Deadlines for receipt of all application materials are June 1 for Fall, October 1 for Spring, and March 1 for Summer.

Definition of Prefixes

GEB—General Business

ISM—Information Systems Management

MAN—Management

MAR—Marketing

QMB—Quantitative Methods in Business

Graduate Courses

Master's

Note: The 5000-level courses are reserved exclusively for graduate students. Courses which may be repeated for credit are designated by “r” immediately following the course number.

GEB 5944r. Graduate Internship (1–6). (S/U grade only). This internship offers a working and learning experience in the business industry. May be repeated to a maximum of six semester hours.

ISM 5008. Fundamentals of Managing Information Technologies (3). This course is designed to provide individuals without business-oriented educational backgrounds with the fundamental knowledge of the various information technologies and systems commonly encountered in the business environment. In addition to gaining a basic understanding of the underlying technologies, more importantly the student gains the knowledge of how to strategically apply them in a business or organizational setting. Cannot be applied for credit for any graduate business degree.

ISM 5021. Information and Technology Management (3). This is an applied course in concepts and techniques used in the design and implementation of management information systems and decision support systems, with emphasis on management of these systems.

ISM 5046. Social and Organization Issues in MIS (3). This course provides students an opportunity to explore some of the issues related to information systems and their place in society. The course focus covers society as a whole, electronic communities, organizational impacts, the implications of design choices, and ethical considerations.

ISM 5123. Systems Analysis and Design (3). In this course, students will learn about the particular MIS perspective on systems development and its life cycle, from the birth of a new information system to its death and replacement. In addition, students learn about the tools, techniques, and methodologies used by systems analysts to develop information systems in organizations.

ISM 5125. Advanced Systems Analysis and Design (3). This course builds on basic systems analysis and design concepts including distributed systems analysis and design. Use cases, quality assurance, performance metrics, and current trends are investigated.

ISM 5136. Data Analytics and Mining for Business (3). This course provides a managerial overview of the state of art technologies and techniques that are used to discover rich and existing patterns for generating business value i.e. “business intelligence” for organizations.

ISM 5206. Database Development and Management (3). Prerequisite: Basic knowledge of relational databases. This course is designed to provide a comprehensive overview of the major issues underlying the organizational utilization of databases and database management systems. Theoretical, conceptual and practical concerns in the design and implementation of database systems are discussed. Organizational concerns in database use are highlighted through the use of case studies.

ISM 5207. Advanced Database Management (3). This course builds on basic database concepts. Topics include physical database design, advanced SQL, data warehousing, data mining, XML data and schemas, database administration and data center administration.

ISM 5226. Network Development and Management (3). This course provides good exposure to the basic telecommunications technology concepts, standards, products and services, and the emerging developments in telecommunications, and provides an understanding of the business context of telecommunication technologies.

ISM 5227. Advanced Telecommunications Management (3). This course builds on basic telecommunications and network management concepts. Topics include physical layer propagation, advanced switch operation, wireless environments, LANs, WANs, network applications, and a comparison of client/server versus Web applications.

ISM 5315. Project Management (3). This course has been designed to be relevant for all professionals confronting project-related tasks, with particular attention given to the information systems context. Course content includes an overview of technology, an introduction to software development approaches, facets of project management, and organizational issues related to successful project management.

ISM 5316. Advanced Project Management (3). Prerequisite: ISM 5315. This course extends the concepts of project management to the management of multiple projects across time and space, including the management of projects outside of the organization through outsourcing, strategic alliances, and off-shore arrangements.

ISM 5327. Corporate Information Security (3). This course examines corporate information security from several perspectives. Topics include differences in security of physical versus digital assets; sources of security threats; solutions involving technology, people, and policy; and proper responses to attacks on digital assets.

ISM 5404. Business Intelligence (3). This course explores the concepts, technologies, and skills needed to produce and interpret actionable intelligence for enhanced managerial decision making.

ISM 5428. Knowledge Management (3). This course examines knowledge management from an organizational perspective. Topics include principles; strategic issues; systems design and development; as well as knowledge creation, capture, sharing, and application.

ISM 5507. E-Business (3). This course examines e-business models. Topics include the application of business strategy, consumer behavior, and customer relationship theories in e-business environments; business-to-business and business-to-consumer arrangements; and supply chain and other e-business infrastructure issues.

ISM 5560. Data Management in Business Analytics (3). This course discusses various data related issues in business analytics and introduce the best practices, underlying principles, and emerging technologies in data management. The course specifically covers: foundational data management concepts; best practices in managing big data; and unstructured data management.

ISM 5564. Business Analytics for Competitive Advantage (3). This course examines the strategic and managerial foundations of business analytics, its use cases and conceptual considerations. Apart from case-led instruction, this course also provides some hands-on experiences with leading-edge software packages, including IBM’s Watson, Tableau, and two textual analytics tools, Semantria and MineMyText.

ISM 5565. Foundational Concepts for Business Analytics (3). This course prepares graduate students in the Business Analytics graduate program with foundational tools and techniques used in subsequent courses. The primary focus is achieving and understanding the role of applied probability methods in business analytics.

ISM 5566. Forecasting, Revenue Management, and Pricing (3). This course explores how “big data” can be used for understanding and analyzing customer demand and behavior. This course surveys the canonical uses of data to analyze consumer demand-time-series forecasting. The course focuses on Exponential Smoothing and ARIMA models, then explores the idea that sales is not the same as demand.

ISM 5569. Business Analytics Capstone (3). This course provides students with an advanced level of analytical skills that enables them to examine business problems by developing models, analyzing alternatives, and recommending solutions using techniques and tools they have learned in previous Business Analytics courses.

ISM 5644. Programming for Analytics (3). This course introduces students to the basics of computer programming for business analytics. The course places special emphasis on utilizing Python programming language for data science and analytics related tasks.

ISM 5906r. Directed Individual Study (1–3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of three semester hours.

ISM 5907r. Special Studies in Management: Information and Systems Management (1–3). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of three semester hours.

ISM 5935r. Special Topics in Information and Management Sciences (1–3). This course is an in-depth study of current topics in information and management sciences. May be repeated to a maximum of three semester hours as topics vary.

MAN 5375. HR Analytics (3). This course focuses on the analysis and application of a company’s HR data to uncover insights that inform HR strategies, process changes, and investments – with the goal of improving organizational performance (i.e., driving business outcomes). Students learn about theory and research regarding drivers of employee performance, retention, and engagement, as well as the critical HR metrics that are important for business outcomes.

MAN 5501. Operations Management (3). This course develops a conceptual framework which is useful in describing the nature of the operations function, with emphasis on identifying basic issues in managing the operations of a service organization.

MAR 5465. Purchasing and Supply Chain Management (3). This course provides an understanding of the purchasing/supply management process by analyzing the sourcing strategies, negotiation tools and contract management techniques required to provide organizations with the best value for their purchase expenditures.

MAR 5466. Logistics and Supply Chain Management (3). This course examines the downstream portion of the supply chain and the strategic marketing implications related to managing customer relationships. Focus is on the management of the processes necessary to stimulate and meet customer demand, as well as on the development of long-term customer relationships.

MAR 5726. Electronic Business in Supply Chain Marketing (3). This course focuses on information technology and how it affects marketing within the supply chain. These include logistical issues and the flow of goods, services, and funds within the supply chain to the final consumer. Specific elements covered include: electronic commerce, Internet, intranets, extranets, marketing information systems and logistics information systems.

QMB 5616. Probabilistic Optimization Methods for Analytics (3). This course teaches students techniques to address problems in regression, discriminant analysis, principal component analysis, logistic regression, SEM, etc. Students will utilize methods such as calculus and linear algebra.

QMB 5755. Quantitative Methods in Business Analytics I (3). This course focuses on deterministic methods of perspective analytics.

QMB 5906r. Directed Individual Study (1–3). (S/U grade only). Prerequisite: Permission from the associate dean for academic programs. Each course is repeatable up to three times.

QMB 5907r. Special Studies in Management (1–3). Prerequisite: Permission from the associate dean for academic programs. May be repeated to a maximum of nine semester hours.

QMB 5935r. Special Topics in Quantitative Methods (1–3). This course is an in-depth study of current topics in quantitative methods in business. May be repeated to a maximum of nine semester hours when topics change.

Doctoral

Note: The doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level. In exceptional cases master's candidates may elect 6000 level courses with permission of the instructor and the associate dean for academic programs.

ISM 6109. Doctoral Seminar in General Systems Theory (3). This seminar is a discussion of the different theories and views about organizations and the design of information and communication systems in organizations. Students gain an appreciation for the close and intertwining nature of the relationship between views of organizations and the philosophies governing the design and use of information systems.

ISM 6395. Doctoral Seminar in Management Information Systems (3). This course addresses the organizational issues associated with effective information technology-based innovation and the management of information technologies in organizational strategies and operations.

ISM 6405. Doctoral Seminar in Decision Processes and Structures (3). This course is a study of the structures and processes of decision-making at the individual, group, and organizational levels. Students also gain an appreciation for the impact of information technologies on these decision-making structures and processes.

ISM 6885. Doctoral Seminar on Applied MIS Research (3). This course is an examination of the process of designing and conducting research projects on information systems phenomena. Students will gain an appreciation for the challenges and issues associated with the application of different research methodologies to MIS phenomena.

ISM 6917r. Supervised Research (1–3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five semester hours.

ISM 6919r. Supervised Teaching (1–3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five semester hours.

ISM 6979. Doctoral Seminar in Research Methods and the Philosophy of Science (3). This seminar is a discussion of the role of research in the academic community, the basis and principles of systems modeling, and the methods of social science research. The seminar also nurtures the motivation to become a contributor to the organizational sciences and information systems research communities by examining research processes, methodologies, and strategies, the information systems research context, concepts, theories, the application of systems modeling, and the nature of organizational sciences research.

ISM 6980r. Dissertation (1–12). (S/U grade only). A minimum of twenty-four semester hours is required.

ISM 8964. Doctoral Preliminary Examination (0). (P/F grade only.)

ISM 8985. Dissertation Defense Examination (0). (P/F grade only.)

MAR 6636. Quantitative Methods I: Measurement, Scaling, and Choice (3). Prerequisite: Instructor permission. This course covers topics such as psychographics, scaling, conjoint measurement, multidimensional scaling, brand switching models, and logit and probit regression. Students develop an understanding of these measurement techniques and apply these models with empirical data.

Graduate Department of CHEMICAL AND BIOMEDICAL ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Website: <http://www.eng.famu.fsu.edu/cbe>

Acting Chair: Bruce Locke; **Professors:** Alamo, Kalu, Locke, Ma, Ramakrishnan, Siegrist, Yeboah; **Associate Professors:** Chella, Grant, Guan, Li, Telotte; **Assistant Professors:** Ali, Chung, Hallinan, Holmes, Mendoza-Cortes, Mohammadigoushki; **Senior Research Associate:** Finney; **Research Faculty I:** Rosenberg; **Teaching Faculty I:** Hunter, Rowe; **Professor Emeritus:** Collier; **Affiliate Faculty:** Hsu, Sachdeva, Shanbhag, Zheng

Program Overview

The Department of Chemical and Biomedical Engineering at the FAMU-FSU College of Engineering offers the degrees of Doctor of Philosophy (PhD) and Master of Science (MS) in both chemical and biomedical engineering, and the Bachelor of Science (BS) degree in chemical engineering. The bachelor's degree is fully accredited by the Engineering Accreditation Commission of ABET, Inc. The Department is strongly committed to building a graduate research program of national reputation in both applied and fundamental areas. The faculty believes that graduate programs must be diverse, interdisciplinary, and flexible in order to prepare chemical and biomedical engineers who can handle the challenging applications in modern research, industry, and society.

Major research areas include:

- Polymers and Complex Fluids
- Multi-Scale Theory, Modeling, and Simulations
- Biomedical Imaging
- Nanoscale Science and Engineering
- Plasma Reaction Engineering
- Renewable and Advanced Power Production and Storage
- Cellular and Tissue Engineering

Many of these efforts are conducted in close cooperation with the Florida State University High Performance Materials Institute (HPMI); Aero-Propulsion, Mechatronics, and Energy (AME) Center; the Institute of Molecular Biophysics (IMB); the FSU Departments of Biological Sciences, Chemistry and Biochemistry, Physics, and Scientific Computing; the National High Magnetic Field Laboratory (NHMFL); the FSU College of Medicine and Department of Biomedical Sciences; the Florida A&M University School of Pharmacy and Pharmaceutical Sciences; as well as with the Departments of Mechanical, Industrial and Manufacturing, and Electrical and Computer Engineering in the College of Engineering.

Please contact the Department of Chemical and Biomedical Engineering at Suite A131, 2525 Pottsdamer Street, Tallahassee, FL, 32310-6046; phone: (850) 410-6149 or 410-6151; fax: (850) 410-6150; e-mail: chemical@eng.famu.fsu.edu; or Web site: <http://www.eng.famu.fsu.edu/cbe>.

Research Facilities

The Department of Chemical and Biomedical Engineering has extensive graduate research laboratory facilities located in the College of Engineering buildings. Three undergraduate teaching laboratories, a design classroom, and fifteen graduate research laboratories comprise the current physical resources. All laboratories are well equipped with modern experimental apparatus. These facilities include laboratories dedicated to polymer science and engineering, electrochemical engineering, gas/liquid phase pollutant treatment by non-thermal plasma, biomass processing, nuclear magnetic resonance, and cell and tissue engineering.

Research facilities include: a 500-MHz (11.75-T) NMR spectrometer; a 4.7 TMRI system; an atomic-force microscope; extensive cell and tissue growth facilities; rheological apparatus; pulsed and DC power supplies; analytical instruments (GC, GC/MS, HPLC, UV-IR, spectrophotometers, TOC, etc.); and analytical microscopes. Process equipment including various types of gas and liquid phase chemical reactors, controlled temperature fermenters, and polymer production reactors are also located in these laboratories. Infrastructure includes autoclaves, controlled environment incubators, water polishing systems, refrigerated/heating circulating baths, isotherm ovens, high purity gas production and mixing systems, refrigerated centrifuges, and additional support equipment.

Faculty and students have access to the FSU Research Computing Center's high-level computing facilities with access to the High Performance Computing (HPC) cluster. Many faculty are also closely affiliated with the world-class National High Magnetic Field Laboratory (<https://nationalmaglab.org>) and make extensive use of NHMFL resources and instrumentation. Additionally, faculty are affiliated with and maintain laboratories at

the Aero-Propulsion, Mechatronics, and Energy Design Center (<http://ame.fsu.edu>); the High Performance Materials Institute (<http://hpmi.research.fsu.edu>); and the NSF CREST Center for Complex Materials for Multidimensional Additive Processing (CoManD Center).

Program in Chemical Engineering

Chemical engineering (ChE) encompasses the development, application, and operation of the processes in which chemical and/or physical changes of material are involved. The work of a chemical engineer is to analyze, develop, design, control, construct, and/or supervise chemical processes in research and development, pilot-scale operations, and industrial production. Emphasis is placed on the application of computer analysis to problems encountered in the above areas. Chemical engineers are employed in the manufacture of inorganic chemicals (i.e., acids, alkalis, pigments, and fertilizers), organic chemicals (i.e., petrochemicals, polymers, fuels, propellants, pharmaceuticals, and specialty chemicals), biological products (i.e., enzymes, vaccines, biochemicals, biofuels, etc.), foods, semiconductors, and paper.

Graduate-level chemical engineers with graduate degrees work in a wide range of organizations for which their technical skills are needed. These organizations may include: local, state, and federal governments; private and public corporations; and education. Chemical engineers are involved in process and plant operation, technical services groups, research and development laboratories, plant design groups, occupational and safety programs, technical sales, technical training, and technical management. Graduate education can lead to careers in the medical sciences, chemical engineering, and other engineering and scientific disciplines as well as business and law.

The thesis MS degree requires thirty semester hours for completion, the non-thesis MS degree requires thirty-three semester hours, and the PhD requires a total of fifty-seven semester hours.

Master of Science (MS)

Admission Requirements

1. A baccalaureate degree in chemical engineering or an allied field from an accredited college or university;
2. Fulfillment of the requirements for the baccalaureate degree or its equivalent. Students may be required to satisfy deficiencies by taking undergraduate courses or they can enroll in a Summer Transition Program if they do not have a degree from an accredited chemical engineering degree program;
3. An undergraduate or graduate GPA of 3.0 (on a 4.0 scale);
4. A minimum revised GRE percentile of at least 48% on the verbal portion and 75% on the quantitative portion of the test. It is noted that the GRE percentiles of funded graduate students on assistantship are typically higher than these minima;
5. Three letters of recommendation from persons familiar with the student's work and background;
6. A personal statement of professional goals; and
7. International students: For students whose native language is not English and who did not graduate from an accredited US institution with either a BS or MS degree, minimum scores on the TOEFL are 550 (paper-based), 213 (computer-based), or 80 (Internet-based).

Students who do not possess a bachelor's degree in chemical engineering may be required to complete a department-designated sequence of undergraduate courses with grade of "B" or higher in each course or must participate in a Summer transition program for students with bachelor's degrees in either another engineering discipline or basic science (e.g., physics, chemistry or biology). In all cases, an applicant must have taken a course in differential equations prior to their matriculation. Typical undergraduate course sequences (in preparation for graduate courses) may include, but are not limited to, the following courses:

- ECH 3023 Mass and Energy Balances I (3)
- ECH 3024 Mass and Energy Balances II (4)
- ECH 3101 Chemical Engineering Thermodynamics (3)
- ECH 3266 Introductory Transport Phenomena (3)
- ECH 3418 Separations Processes (3)
- ECH 3854 Chemical Engineering Computations (3)
- ECH 4267 Advanced Transport Phenomena (3)
- ECH 4504 Kinetics and Reactor Design (3)

Additional courses in subjects including mathematical, chemistry, physics, and general engineering may also be required. Departmental financial support may not be available for graduate students taking undergraduate courses. Up to six semester hours of 4000-level coursework approved by the department

may be counted as graduate electives. Transfer credit from another institution is limited to six semester hours with departmental approval. Acceptance of equivalent courses is evaluated on a case-by-case basis, following petition to the Graduate Committee.

Eligible candidates for the Summer Transition Program for non-ChE/BME majors (<https://www.eng.famu.fsu.edu/cbe/graduate/transition-program>), which would replace the majority of the above course requirements, will be identified and notified by the Graduate Admissions Committee. Additional information about the Summer Transition Program can be found below and at the departmental Web site or by contacting the Graduate Coordinator.

Degree Requirements

The Department of Chemical and Biomedical Engineering offers both thesis-type and course-type (non-thesis) options leading to the Master of Science (MS) degree. Each semester, all graduate students are required to enroll in and attend ECH 5935r: Chemical Engineering Seminar (0) (S/U grade only). In addition, all students are required to take required safety training courses and annual refreshers. All graduate students are required to attend either the College of Engineering Orientation or the FSU Program for Instructional Excellence (PIE) Teaching Conference/TA Orientation (<http://pie.fsu.edu>) to prepare for teaching assistant (TA) duties. This requirement is mandatory regardless of the student's classification as a teaching assistant or research assistant. For international graduate students, the SPEAK (Speaking Proficiency English Assessment Kit) is a test for evaluating the English-speaking ability of non-native speakers of English. At FSU, the SPEAK test is administered by the Center for Intensive English Studies to international students who have been appointed or will be appointed as teaching assistants in an academic department at Florida State University. The SPEAK exam requirement must be cleared (scores greater than 45 or 50 for graders or TAs, respectively) before students can serve as teaching assistants.

I. Thesis Option (thirty semester hours)

The thesis-type master's degree is awarded upon successful completion of the following requirements:

1. Twelve semester hours of chemical engineering core courses (see below);
2. Nine semester hours of approved electives;
3. Nine semester hours of ECH 5971r: Thesis (1-12) (S/U grade only);
4. Oral defense of the master's thesis, ECH 8976: Thesis Defense (0) (P/F grade only);
5. Registration and attendance at all departmental seminars, ECH 5935r: Chemical Engineering Seminar (0) (S/U grade only).

No course with a grade below "C" will be counted toward fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted toward fulfillment of degree requirements.

Required Core Engineering Courses (twelve semester hours)

- ECH 5052 Research Methods in Chemical Engineering (3)
- ECH 5126 Advanced Chemical Engineering Thermodynamics I (3)
- ECH 5261 Advanced Transport Phenomena I (3)
- ECH 5840 Advanced Chemical Engineering Mathematics I (3)
- ECH 8976 Thesis Defense (0) (P/F grade only)

Elective Courses (nine semester hours)

Typical chemical engineering elective courses:

- ECH 5262 Advanced Transport Phenomena II (3)
- ECH 5526 Advanced Reactor Design (3)
- ECH 5828 Introduction to Polymer Science and Engineering (3)
- ECH 5841 Advanced Chemical Engineering Mathematics II (3)
- ECH 5852 Advanced Chemical Engineering Computations (3)
- ECH 5905 Directed Individual Study (3)
- ECH 5910 Supervised Research (3)
- ECH 5934r Special Topics in Chemical Engineering (3)
- ECH 6272 Molecular Transport Phenomena (3)

Other elective courses may be found in this *Graduate Bulletin*.

Thesis Hours (nine semester hours)

- ECH 5971r Thesis (1-12) (S/U grade only).

In addition to the thirty semester hours of coursework and thesis, an oral examination in defense of the thesis (ECH 8976) is required for the MS in the chemical engineering thesis option. At least two hours of thesis (ECH 5971r) must be registered for concurrently during the term of the thesis defense (ECH 8976).

II. Course (non-thesis) Option (thirty-three semester hours)

The **course-type** master's degree is awarded upon successful completion of the following requirements:

1. Twelve semester hours of chemical engineering core courses (see below);
2. Twenty-one semester hours of approved electives;
3. Registration and attendance at all departmental seminars, ECH 5935r: Chemical Engineering Seminar (0) (S/U grade only).

No course with a grade below "C" will be counted toward fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted toward fulfillment of degree requirements.

Note: Departmental support is generally not available for students pursuing a non-thesis master's degree.

Required Courses (twelve semester hours)

- ECH 5052 Research Methods in Chemical Engineering (3)
 ECH 5126 Advanced Chemical Engineering Thermodynamics I (3)
 ECH 5261 Advanced Transport Phenomena I (3)
 ECH 5840 Advanced Chemical Engineering Mathematics I (3)

Elective Courses (twenty-one semester hours)

Typical chemical engineering elective courses:

- ECH 5262 Advanced Transport Phenomena II (3)
 ECH 5526 Advanced Reactor Design (3)
 ECH 5828 Introduction to Polymer Science and Engineering (3)
 ECH 5841 Advanced Chemical Engineering Mathematics II (3)
 ECH 5852 Advanced Chemical Engineering Computations (3)
 ECH 5905 Directed Individual Study (3)
 ECH 5910 Supervised Research (3)
 ECH 5934r Special Topics in Chemical Engineering (3)
 ECH 6272 Molecular Transport Phenomena (3)

Other elective courses may be found in this *Graduate Bulletin*.

Doctor of Philosophy (PhD)

Admission Requirements

1. Fulfillment of the Department's admission and core course requirements for the master's degree or its substantive equivalent (see above);
2. Maintenance of a high scholastic record for graduate coursework at the previous college or university attended;
3. Demonstrated proficiency in conducting research in chemical engineering by passing the departmental PhD Qualifying Examination (see PhD Qualifying Examination requirements below and on the departmental Web site for more details).

Students who meet the admission requirements are encouraged to apply directly for the PhD program. Students who maintain a 3.0 graduate GPA and demonstrate proficiency in conducting research in chemical engineering by passing the departmental PhD Qualifying Examination (see 'PhD Qualifying Examination Requirements' below and on the departmental Web site for more details) are admitted to PhD candidacy if they have satisfied departmental core course requirements for the master's degree. Students who fulfill these requirements may elect, upon approval of the Graduate Committee and major supervisor, to proceed directly toward the PhD without first obtaining a thesis-based master's degree.

Students with a thesis-type master's degree in chemical engineering from the FAMU-FSU College of Engineering may, with approval of the Graduate Committee and major professor, take nine additional approved semester hours beyond the master's requirements to satisfy the thirty-three hour course requirement for the PhD. All other requirements must be fulfilled as stated below.

Students with master's degrees from other institutions will be given a specific course plan by the departmental Graduate Committee and have the option of transferring up to six hours towards their PhD requirements.

Degree Requirements

Each semester, all graduate students are required to enroll in and attend ECH 5935r: Chemical Engineering Seminar (0) (S/U grade only). In addition, all students are required to take required safety training courses and annual refreshers. All graduate students are required to attend either the College of Engineering Orientation or the FSU Program for Instructional Excellence (PIE) Teaching Conference/TA Orientation (<http://pie.fsu.edu>) to prepare for teaching assistant (TA) duties. This requirement is mandatory regardless of the student's classification as a teaching assistant or research assistant. For

international graduate students, the SPEAK (Speaking Proficiency English Assessment Kit) is a test for evaluating the English-speaking ability of non-native speakers of English. At FSU, the SPEAK test is administered by the Center for Intensive English Studies to international students who have been appointed or will be appointed as teaching assistants in an academic department at Florida State University. The SPEAK exam requirement must be cleared (scores greater than 45 or 50 for graders or TAs, respectively) before students can serve as teaching assistants or progress to full PhD candidate status.

Fifty-seven semester hours and the following requirements must be completed successfully for the award of the PhD degree in Chemical Engineering:

1. Passage of ECH 8965: Doctoral Preliminary Examination within two consecutive exam attempts (see PhD Qualifying Examination requirements below for more details). Successful completion will result in formal admission to PhD candidacy;
2. Completion of thirty-three semester hours of advanced coursework (including twelve semester hours of core graduate coursework as indicated above);
3. Completion of at least twenty-four semester hours of dissertation research, ECH 6980r: Dissertation (1-9) (S/U grade only);
4. Registration and attendance at all departmental seminars, ECH 5935r: Chemical Engineering Seminar (0) (S/U grade only);
5. Selection of a research topic and major professor(s);
6. Formation of a supervisory committee in consultation with the major professor(s);
7. Submission and defense of a prospectus on the dissertation topic to the supervisory committee;
8. One semester teaching assistantship in an undergraduate laboratory;
9. Presentation of a research topic at one local, regional, national or international professional meeting;
10. Submission or publication of scholarly articles based on original dissertation research in peer-reviewed journals;
11. Satisfaction of the University Scholarly Engagement requirement; and
12. Successful passage of ECH 8985: Dissertation Defense (0) (P/F grade only). At least two hours of dissertation (ECH 6980r) must be registered for concurrently during the term of the dissertation defense (ECH 8985).

No course with a grade below "C" will be counted toward fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted toward fulfillment of degree requirements.

Program in Biomedical Engineering

Dramatic advances in health care and medical technology made possible by the merger of engineering and medicine have prompted the development of new graduate degree programs in biomedical engineering at many of the top institutions in the United States. Currently, biomedical engineering is the most rapidly growing graduate engineering discipline in the U.S with expectations of more labor force growth than any other engineering discipline over the next ten years. The overall goal of this program is to implement education and research in biomedical engineering that will prepare graduates for industrial, governmental, and academic careers in clinical research, bioengineering, biotechnology, and related professions. Biomedical engineers analyze and design solutions to problems in medicine and biology, with the goal of improving the quality and effectiveness of patient care.

The graduate program in biomedical engineering (BME) provides special emphasis in cellular and tissue engineering, biomaterials, and bioimaging. Advanced engineering, medicine, chemistry, physics, and biology students will gain the necessary knowledge and skills that will allow them to contribute to improved technology in health and medical care, and to solve real-world engineering problems in biology and medicine, both in research and industrial settings.

The thesis MS degree requires thirty semester hours for completion, the non-thesis MS degree requires thirty-three semester hours, and the PhD requires a total of fifty-seven semester hours.

Master of Science (MS)

Admission Requirements

1. A baccalaureate degree in chemical or biomedical engineering, or an allied field from an accredited college or university;
2. Fulfillment of the requirements for the baccalaureate degree or its equivalent. Students may be required to satisfy deficiencies by taking undergraduate courses or can enroll in a Summer Transitional Program if they do not have a degree from an accredited chemical engineering degree program;

- An undergraduate or graduate GPA of 3.0 (on a 4.0 scale) or higher;
- A minimum revised GRE percentile of at least 48% on the verbal portion and 75% on the quantitative portion of the test. It is noted that the GRE percentiles of funded graduate students on assistantship are typically higher than these minima;
- Three letters of recommendation from persons familiar with the student's work and background;
- A personal statement of professional goals; and
- International students: For students whose native language is not English and who did not graduate from an accredited US institution with either a BS or MS degree, minimum scores on the TOEFL are 550 (paper-based), 213 (computer-based), or 80 (Internet-based).

Students who do not possess a bachelor's degree in chemical engineering may be required to complete a department-designated sequence of undergraduate courses with grade of "B" or higher in each course, or must participate in a Summer transition program for students with bachelor's degrees in either another engineering discipline or basic science (e.g., physics, chemistry, or biology). In all cases, an applicant must have taken a course in differential equations prior to their matriculation. Typical undergraduate course sequences (in preparation for graduate courses) may include, but are not limited to, the following courses:

- ECH 3023** Mass and Energy Balances I (3)
- ECH 3024** Mass and Energy Balances II (4)
- ECH 3266** Transport Phenomena (3)
- ECH 3418** Separations Processes (3)
- ECH 4267** Transport Phenomena II (3)
- ECH 4504** Kinetics and Reactor Design (3)
- BME 4403C** Quantitative Anatomy and Systems Physiology I (3)
- BME 4404C** Quantitative Anatomy and Systems Physiology II (3)

In addition, students should also have taken Biological Sciences I (if not included in their degree program). Additional courses in subjects including mathematics, chemistry, physics, and general engineering may also be required. Up to six semester hours of 4000-level coursework approved by the department may be counted as graduate electives. Transfer credit from another institution is limited to six semester hours with departmental approval. Acceptance of equivalent courses is evaluated on a case-by-case basis, following petition to Graduate Committee.

Eligible candidates for the Summer Transition Program for non-ChE/BME majors (<https://www.eng.famu.fsu.edu/cbe/graduate/transition-program>), which would replace the majority of the above course requirements, will be identified and notified by the Graduate Admissions Committee. Additional information about the Summer Transition Program can be found below and at the departmental Web site or by contacting the Graduate Coordinator.

Degree Requirements

The Department of Chemical and Biomedical Engineering offers both thesis-type and course-type (non-thesis) options leading to the Master of Science (MS) degree. Each semester, all graduate students are required to enroll in and attend BME 5935r: Chemical Engineering Seminar (0) (S/U grade only). In addition, all students are required to take required safety training courses and annual refreshers. All graduate students are required to attend either the College of Engineering Orientation or the FSU Program for Instructional Excellence (PIE) Teaching Conference/TA Orientation (<http://pie.fsu.edu>) to prepare for teaching assistant (TA) duties. This requirement is mandatory regardless of the student's classification as a teaching assistant or research assistant. For international graduate students, the SPEAK (Speaking Proficiency English Assessment Kit) is a test for evaluating the English-speaking ability of non-native speakers of English. At FSU, the SPEAK test is administered by the Center for Intensive English Studies to international students who have been appointed or will be appointed as teaching assistants in an academic department at Florida State University. The SPEAK exam requirement must be cleared (scores greater than 45 or 50 for graders or TAs, respectively) before students can serve as teaching assistants.

I. Thesis Option (thirty semester hours)

The **thesis-type** master's degree is awarded upon successful completion of the following requirements:

- Twelve semester hours of chemical engineering core courses (see below);
- Nine semester hours of approved electives;
- Nine semester hours of BME 5971r: Thesis (1-9) (S/U grade only);
- Oral defense of the master's thesis, BME 8976: Thesis Defense (0) (P/F grade only);

- Registration and attendance at all departmental seminars, BME 5935r: Biomedical Engineering Seminar (0) (S/U grade only).

No course with a grade below "C" will be counted toward fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted toward fulfillment of degree requirements.

Required Courses (twelve semester hours)

- ECH 5052** Research Methods in Chemical Engineering (3)
- ECH 5261** Advanced Transport Phenomena I (3)
- ECH 5840** Advanced Chemical Engineering Mathematics I (3)
- BME 8976** Thesis Defense (0) (P/F grade only)
- XXX XXXX** Approved course in physiology or cell biology (3)

An approved course in physiology or cell biology is required for completion of the graduate BME degree. Approved courses include: **PCB 5137** (Advanced Cell Biology), **PCB 5525** (Molecular Biology), **PCB 5795** (Sensory Physiology), and **PCB 5845** (Cell and Molecular Neuroscience). Additional courses may satisfy the physiology/biology requirement but require petition to the Graduate committee for approval as a core substitute.

Elective Courses (nine semester hours)

Typical biomedical engineering elective courses:

- BME 5086** Biomedical Engineering Ethics (3)
- BME 5905** Directed Individual Study (3)
- BME 5910** Supervised Research (3)
- BME 5937r** Special Topics in Biomedical Engineering (3)
- BME 6530** NMR and MRI Methods in Biology and Medicine (3)

Other elective courses may be found in this *Graduate Bulletin*.

Thesis Hours (nine semester hours)

- BME 5971r** Thesis (1-9) (S/U grade only)

In addition to the thirty semester hours of coursework and thesis, an oral examination in defense of the thesis (BME 8976) is required for the MS in the chemical engineering thesis option. At least two hours of thesis (BME 5971r) must be completed during the term of the thesis defense (BME 8976).

II. Course (non-thesis) Option (thirty-three semester hours)

The **course-type** master's degree is awarded upon successful completion of the following requirements:

- Twelve semester hours of chemical engineering core courses (see below);
- Twenty-one semester hours of approved electives;
- Registration and attendance at all departmental seminars, BME 5935r: Biomedical Engineering Seminar (0) (S/U grade only).

No course with a grade below "C" will be counted toward fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted toward fulfillment of degree requirements.

Note: Departmental support is generally not available for students pursuing a non-thesis master's degree.

Required Courses (twelve semester hours)

- ECH 5052** Research Methods in Chemical Engineering (3)
- ECH 5261** Advanced Transport Phenomena I (3)
- ECH 5840** Advanced Chemical Engineering Mathematics I (3)
- XXX XXXX** Approved course in physiology or cell biology (3)

An approved course in physiology or cell biology is required for completion of the graduate BME degree. Approved courses include: **PCB 5137** (Advanced Cell Biology), **PCB 5525** (Molecular Biology), **PCB 5796** (Sensory Physiology), and **PCB 5845** (Cell and Molecular Neuroscience). Additional courses may satisfy the physiology/biology requirement but require petition to the Graduate committee for approval as a core substitute.

Elective Courses (twenty-one semester hours)

Typical biomedical engineering elective courses:

- BME 5086** Biomedical Engineering Ethics (3)
- BME 5905** Directed Individual Study (3)
- BME 5910** Supervised Research (3)
- BME 5937r** Special Topics in Biomedical Engineering (3)
- BME 6530** NMR and MRI Methods in Biology and Medicine (3)

Other elective courses may be found in this *Graduate Bulletin*.

Doctor of Philosophy (PhD)

Admission Requirements

1. Fulfillment of the department's admission and core course requirements for the chemical engineering master's degree or its substantive equivalent (see above);
2. Maintenance of a high scholastic record for graduate coursework at the previous college or university attended; and
3. Demonstrated proficiency in conducting research in chemical engineering by passing the departmental PhD Qualifying Examination (see PhD Qualifying Examination requirements below and on the departmental Web site for more details).

Students who meet the admission requirements are encouraged to apply directly for the PhD program. Students who maintain a 3.0 graduate GPA and demonstrate proficiency in conducting research in biomedical engineering by passing the departmental PhD Qualifying Examination (see PhD Qualifying Examination Requirements below and on the departmental Web site for more details) are admitted to PhD candidacy if they have satisfied the departmental core course requirements for the master's degree. Students who fulfill these requirements may elect, upon approval of the Graduate Committee and major supervisor, to proceed directly toward the PhD without first obtaining a thesis-based master's degree.

Students with a thesis-type master's degree in chemical or biomedical engineering from the FAMU-FSU College of Engineering may, with approval of the Graduate Committee and major professor, take nine additional approved semester hours beyond the thesis-type master's course requirements to satisfy the thirty-three-hour course requirement for the PhD. All other requirements must be fulfilled as stated below.

Students with master's degrees from other institutions will be given a specific course plan by the departmental Graduate Committee and have the option of transferring up to six hours towards their PhD requirements.

Degree Requirements

Each semester, all graduate students are required to enroll in and attend the departmental seminar, BME 5935r: Biomedical Engineering Seminar (0) (S/U grade only). In addition, all students are required to take required safety training courses. All graduate students are required to attend either the College of Engineering Orientation or the FSU Program for Instructional Excellence (PIE) Teaching Conference/TA Orientation (<http://pie.fsu.edu>) to prepare for teaching assistant (TA) duties. This requirement is mandatory regardless of the student's classification as a teaching assistant or research assistant. For international graduate students, the SPEAK (Speaking Proficiency English Assessment Kit) is a test for evaluating the English-speaking ability of non-native speakers of English. At FSU, the SPEAK test is administered by the Center for Intensive English Studies to international students who have been appointed or will be appointed as teaching assistants in an academic department at Florida State University. The SPEAK exam requirement must be cleared (scores greater than 45 or 50 for graders or TAs, respectively) before students can serve as teaching assistants or progress to full PhD candidate status.

Fifty-seven semester hours and the following requirements must be completed successfully for the award of the PhD degree in Biomedical Engineering, as follows:

1. Passage of BME 8965: BME Doctoral Qualifying Examination within two consecutive exam attempts (see PhD qualifying examination requirements below for more details). Successful completion will permit the student to continue work towards PhD candidacy;
2. Completion of a minimum of thirty-three semester hours of advanced coursework (including twelve semester hours of core coursework);
3. Completion of at least twenty-four semester hours of dissertation research, BME 6980r: Dissertation (1-9) (S/U grade only);
4. Registration and attendance at all departmental seminars, BME 5935r: Biomedical Engineering Seminar (0) (S/U grade only);
5. Selection of a research topic and major professor(s);
6. Formation of a supervisory committee in consultation with the major professor(s);
7. Submission and defense of a prospectus on the dissertation topic to the supervisory committee. Successful completion will result in formal admission to candidacy for the PhD degree;
8. One semester teaching assistantship in an undergraduate laboratory;
9. Presentation of a research topic at one local, regional, national, or international professional meeting;
10. Submission or publication of at least one scholarly article based on original dissertation research in peer-reviewed journals;

11. Satisfaction of the University Scholarly Engagement requirement; and
12. Successful passage of BME 8985: Dissertation Defense (0) (P/F grade only). At least two hours of dissertation (BME 6980r) must be completed during the term of the dissertation defense (BME 8985).

No course with a grade below "C" will be counted toward fulfillment of degree requirements. No more than one course with a grade in the "C" range will be counted toward fulfillment of degree requirements.

Transition Program for Non-Chemical or Non-Biomedical Engineering Majors

The Graduate Committee of the Department of Chemical and Biomedical Engineering has instituted an accelerated transition program for prospective graduate students who are non-Chemical or non-Biomedical Engineering Majors. These students should follow the Summer preparatory curriculum shown below in order to formally enter the FAMU-FSU Chemical and Biomedical Engineering graduate program. More details are available online at the departmental Web site.

Target Applicants and Eligibility

1. Applicants with non-ChE or non-BME BS degrees in engineering.
2. Applicants with Physics BS degrees.
3. Applicants with Chemistry, Biochemistry, or Biology BS degrees having strong math skills (through Ordinary Differential Equations).

Transition Program Requirements

The transition program requires that students take one online course and one accelerated transition course during the preparatory Summer prior to taking the graduate core courses offered in the Fall semester, as follows:

1. ACS online course or equivalent – "Beakers to Barrels: Chemical Engineering for Chemists" Online Short Course. This course will be replaced in subsequent years by a departmental online course;
2. Graduate preparatory course – combined summer course of Mass and Energy Balances, Transport I and II, and Thermodynamics for accelerated preparation of entering students. Two three credit hour six-week courses (Summer terms B and C) will be taken during the Summer before core ECH/BME coursework; and
3. Required completion of the graduate section of ECH 4504: Kinetics and Reactor Design.

Requirements 1 and 2 must be completed successfully prior to matriculation in Fall core graduate courses. Students who do not successfully complete all three requirements before their third semester in the graduate program will not be allowed to continue.

Notes: Students needing to take any mathematics course(s) through differential equations would need to complete these prior to entrance. Students needing a course in ordinary differential equations should take ECH 3301: Process Analysis.

Other graduate electives or thesis hours can be taken during the first two years if prerequisites are met.

Courses prior to the first Fall semester will be at the student's expense or supported by the department based on available funds.

The PhD Qualifying Examination (see below) follows the first Spring semester.

Academic Regulations and Procedures for Graduate Students

Selection of Course Plan

Selection of courses for the first semester should be done in consultation with the departmental Graduate Coordinator. All students must also register for the departmental seminar ECH/BME 5935r, Chemical/Biomedical Engineering Seminar, every semester. After the first semester in the graduate program, the supervising major professor will develop a course plan for MS-thesis and PhD candidates. For course-based MS students, the departmental Graduate Coordinator will assist in developing the course plan, acting as the *de facto* supervisor.

Selection of Major Professor

All full-time graduate students following the MS thesis or PhD options are required to select a research topic and major professor by the end of the first term in which they enter the Department. A form for this purpose is available online at the departmental Web site. The completed form should be submitted to the departmental Graduate Coordinator.

The major professor is responsible for directing the student's research and progress toward a degree. Once a major professor has been approved, a super-

visory committee should be established and a program of study prepared in consultation with the major professor before the end of the second semester of enrollment in the graduate program.

Supervisory Committee

The supervisory committee for a master's degree candidate must consist of a minimum of three faculty members with graduate faculty status. The major professor is the chair of the supervisory committee and must be a faculty member from the Department of Chemical and Biomedical Engineering. At least one other member of the committee must be from the Department of Chemical and Biomedical Engineering; the third member of the committee should be from outside the department. Additional members may be appointed to the committee if deemed desirable by the major professor.

The supervisory committee for a doctoral candidate must have at least four members (including major professor) with graduate faculty status. The major professor is the chair of the supervisory committee and must be a faculty member from the Department of Chemical and Biomedical Engineering. Two of the remaining members of the committee must be from the Department of Chemical and Biomedical Engineering, and the fourth member must be from outside the Department. Additional members may be appointed if deemed desirable. Members of the supervisory committee must be approved by the Department Chair.

Program of Study

A program of study should be prepared by the student in conjunction with the major professor and submitted to the supervisory and graduate committees. For graduate students working toward a thesis-based MS or PhD, the program of study should be defined based on the student's background and research objectives, in consultation with the major professor and supervisory committee. For graduate students working toward a course-based MS, the program of study should be defined in consultation with the Graduate Committee. The program of study is a complete plan of courses to be taken and research objectives to be achieved. On approval of the program of study, this form will also be placed in the student's permanent file. If changes to the initially approved program of study become necessary, a new program of study form must be submitted for approval.

PhD Qualifying Examination and Prospectus

All students admitted to the PhD program will be required to take the PhD qualifying examination after completion of the core course ECH 5052, Research Methods in Chemical Engineering. A research topic will be assigned by the graduate qualifying examination committee. The student must write a research proposal and defend it orally in front of the graduate qualifying-examination committee by the end of the first Summer semester, unless otherwise approved by the Graduate Committee. This examination must be passed within two consecutive attempts, or the individual will not be allowed to continue as a doctoral student. For additional details, see PhD Qualifying Examination Requirements on the departmental Web site.

Upon successful completion of the qualifying examination, the student may continue work toward the PhD degree. Within five semesters of admission to the graduate program (within the three semesters following the PhD qualifying examination), students are expected to present a prospectus detailing their program of study for PhD dissertation work. If this timeframe cannot be met, the student must petition the graduate program chair for special dispensation, stating specific reasons for the delay. The PhD prospectus will consist of a written plan of research that must be orally defended in a formal presentation before the student's major professor and supervisory committee. After the successful completion of the PhD prospectus, the student will be admitted formally to the PhD candidacy and their research program. The doctoral committee should provide continual feedback to the PhD candidate throughout the progression of the student's research. As such, it is important to maintain regular and at least annual meetings of the student and doctoral committee so that updates on research can be presented and feedback can be received by the student. For additional details, see Academic Regulations and Procedures for Graduate Students at <https://www.eng.famu.fsu.edu/cbe/graduate-resources>.

Maintenance of Good Standing

In order to maintain good standing in the department, the student must maintain an overall GPA of at least 3.0, with no more than two grades in the "C" range. No more than one course in the "C" range will be counted toward fulfilling the degree requirements. No grades below "C" will be counted toward degree requirements. Students without an undergraduate degree in chemical or biomedical engineering should obtain a grade of "B" or better in all required undergraduate courses.

Master's and doctoral degree students must submit a brief written annual report on research progress, goals, and completed courses during the Spring

semester for evaluation by the graduate and supervisory committees. A form for this purpose is available on the departmental Web site. An assessment of the progress of the student in research and courses by the student's supervisory committee will be placed in the student's permanent file. Continuance of assistantships and/or tuition waivers is contingent upon satisfactory evaluations.

Time to Degree Completion

Students with undergraduate degrees in chemical or biomedical engineering normally complete the thesis-type master's program in four to five semesters, including one Summer semester. Although the availability of departmental support ultimately is subject to budgetary constraints, the Graduate Committee will not normally recommend continuation of assistantships and tuition waivers beyond a period of two years subsequent to the student's admission to the master's program. Students without an undergraduate degree in chemical or biomedical engineering will be given one additional year for completion. However, these students are normally not supported financially during their first year, when they are primarily taking preparatory undergraduate chemical/biomedical engineering courses.

Students with undergraduate degrees in chemical or biomedical engineering normally complete the doctoral program within five years of their admission to graduate school, with reduced time expected if the student enters the program with a master's degree. Although the availability of departmental support ultimately is subject to budgetary constraints, departmental/college commitments, and research grant availability, doctoral candidates will be recommended for departmental support only for a period of three years subsequent to being admitted to candidacy for the doctoral program following the successful completion of the PhD Qualifying Examination. PhD students should submit and defend a prospectus on the dissertation topic to the supervisory committee within five semesters from admission to the graduate program.

Assistantship Duties

Graduate student support is generally in the form of research or teaching assistantships (RAs or TAs), although University fellowships are also available. Research assistantships derived from contracts and grants focus mainly on the performance of research leading to their degree but may be required to perform service to the department in the form of minimal teaching duties. However, research assistants who receive departmental support for tuition waivers will be required to grade, TA, or run recitation sections for lecture courses in addition to research responsibilities. Doctoral candidates will also have to satisfy the teaching requirements of the degree (TA for one laboratory course). Typical TA duties include grading homework and/or exams, conducting problem-solving recitation sections, and having office hours for answering student questions. Specific duties are assigned by the course instructor.

Definition of Prefixes

BME—Biomedical Engineering

ECH—Engineering: Chemical

Graduate Courses

Biomedical Engineering

BME 5086. Biomedical Engineering Ethics (3). Prerequisite: Senior or graduate standing in Biomedical Engineering. This course offers an introduction to the key theories, concepts, principles, and methodology relevant to the development of biomedical professional ethics. The student is facilitated in his/her development of a code of professional ethics by written work, class discussion and case analysis.

BME 5905r. Directed Individual Study (1-3). Prerequisite: Instructor permission. This course allows students to do a detailed examination of some topic in biomedical engineering. Conducted on a personal basis with the instructor. A maximum of only three semester hours can be used toward the MS or PhD. May be repeated to a maximum of twelve semester hours as topics change.

BME 5910. Supervised Research (3). (S/U grade only). Prerequisites: Graduate standing in Biomedical Engineering and instructor permission. This course consists of the performance of research project required for the non-thesis MS degree.

BME 5935r. Biomedical Engineering Seminar (0). (S/U grade only). Prerequisite: Graduate standing in Biomedical Engineering. This seminar consists of presentations by faculty, students, and visiting scientists. Full-time graduate students must enroll each term.

BME 5937r. Special Topics in Biomedical Engineering (3). Prerequisite: Instructor permission. This course is a detailed study of some topic of special interest to biomedical engineers. May be repeated to a maximum of six semester hours in the same term, as topics vary.

BME 5971r. Master's Thesis Research (1–12). (S/U grade only). This course provides a means of registering for thesis research work and recording progress towards its completion. Student must consult with the academic department for appropriate registration of course credit hours. May be repeated to a maximum of forth-five (45) credit hours; repeatable within the same term.

BME 6530. NMR and MRI Methods in Biology and Medicine (3). Prerequisite: Doctoral candidate status in Biomedical Engineering. This course investigates MR imaging methods, spin echo methods, Bloch equations, proton diffusion, imaging, and microimaging NMR spectrometers in research.

BME 6980r. Dissertation (1–9). Prerequisite: Admission to doctoral candidacy. This course consists of research on the dissertation topic. May be repeated as often as approved by the supervisory committee. May be repeated to a maximum of twenty-four semester hours.

BME 8965r. Doctoral Qualifying Exam (0). (P/F grade only.) Prerequisite: Doctoral candidate status in Biomedical Engineering. All doctoral students must enroll in this course the semester they intend to take the qualifying exam.

BME 8976. Thesis Defense (0). (P/F grade only.) Prerequisite: Instructor permission. All students must register for this course for the term during which they intend to defend their thesis.

BME 8985. Dissertation Defense (0). (P/F grade only.) Prerequisites: Doctoral candidate status in Biomedical Engineering and instructor permission. This course must be included in the final semester schedule for all doctoral students.

Chemical Engineering

ECH 5052. Research Methods in Chemical Engineering (3). This course for first-term graduate students includes instruction in the performance of scientific research, including problem definition, literature review, project proposal development, laboratory and computational research, oral presentations, technical report writing, and professional conduct.

ECH 5126. Advanced Chemical Engineering Thermodynamics I (3). Prerequisite: ECH 3101 or equivalent. This course presents the fundamental aspects of classical thermodynamics, and its application to multicomponent, multiphase, and chemically reacting systems. Introduction to the thermodynamics of irreversible processes and statistical mechanics.

ECH 5261. Advanced Transport Phenomena I (3). Prerequisite: ECH 5842 or instructor permission. This course examines the development of the fundamental aspects of continuum mechanics in order to describe the transport of momentum, energy, and mass. The basic equations of fluid mechanics are developed, and a number of applications to chemical engineering problems are considered. Also emphasizes boundary conditions at phase interfaces, and derivation of the point and macroscopic balance equations for these transport processes.

ECH 5262. Advanced Transport Phenomena II (3). Prerequisite: ECH 5261. This course is a rigorous analysis of transport phenomena at the micro- and macroscopic scales in systems with mixtures of several components and featuring more than one phase. Boundary layer flows, mixing effects, transport in porous and structured media, transport processes at interfaces.

ECH 5526. Advanced Reactor Design (3). Prerequisite: ECH 4504. This course is a study of catalytic and noncatalytic reactor design for homogeneous and heterogeneous systems. Includes non-ideal flow and mixing, including distribution functions and modeling.

ECH 5828. Introduction to Polymer Science and Engineering (3). Prerequisites: Graduate standing and instructor permission. This course explores the classification and characterization of polymeric systems. Topics include the introduction to the physical chemistry, synthesis and reaction kinetics, reaction engineering, characterization, and the processing and properties of polymeric systems.

ECH 5840. Advanced Chemical Engineering Mathematics I (3). Prerequisite: ECH 4403 and MAP 3305. This course is an introduction at the graduate level to the mathematical formulation and solution of chemical engineering problems involving transport phenomena and reaction. Course includes dimensional analysis and scaling, linear algebraic, ordinary, and partial differential equations, vector and tensor analysis, Fourier series, Integral (Fourier and Laplace) transforms, boundary value problems.

ECH 5841. Advanced Chemical Engineering Mathematics II (3). Prerequisite: ECH 5840. This course presents advanced mathematical techniques for chemical engineering applications within a unified framework of operator-theoretic methods. Green's functions solution of partial differential equations, regular and singular perturbation techniques, boundary value problems, and boundary-element and finite-element techniques.

ECH 5852. Advanced Chemical Engineering Computations (3). Prerequisites: ECH 5841. This course presents the central concepts of practical numerical analysis techniques and their application to chemical engineering problems. The course includes interpolation and approximation theory, solution of linear and nonlinear systems, solution of ordinary differential and partial differential equations, single step and multi-step methods, stiff systems, and two-point boundary problems.

ECH 5905r. Directed Individual Study (1–3). Prerequisite: Instructor permission. This course is a detailed examination of some topic in chemical engineering. Conducted on a personal basis with the instructor. May be repeated with different topics. Only three semester hours may be used toward the MS degree.

ECH 5910. Supervised Research (3). (S/U grade only). Prerequisite: Instructor permission. In this course, students perform a research project required for the non-thesis MS degree.

ECH 5934r. Special Topics in Chemical Engineering (3). Prerequisite: Instructor permission. This course is a detailed study of some topic of special interest to chemical engineers. Typical topics might include: aerosol mechanics, polymer processing, combustion, bioseparations, fluidization. May be repeated to a maximum of six semester hours with different topics. May be repeated in the same semester.

ECH 5935r. Chemical Engineering Seminar (0). (S/U grade only). This seminar consists of presentations by faculty, students, and visiting scientists. Full-time graduate students must enroll each term.

ECH 5971r. Master's Thesis Research (1–12). (S/U grade only). This course provides a means of registering for thesis research work and recording progress towards its completion. Students must consult with the academic department for appropriate registration of course credit hours. May be repeated to a maximum of forty-five (45) credit hours; repeatable within the same term.

ECH 6272. Molecular Transport Phenomena (3). Prerequisite: Graduate standing. This course examines the theory of transport phenomena from a molecular viewpoint. Classical concepts from statistical mechanics and derivation of the Boltzmann equation. The transport theory and properties of dilute gases are developed from the Boltzmann equation, with a more general treatment given for the case of liquids. A brief introduction to time correlation functions is presented.

ECH 6980r. Dissertation (1–24). (S/U grade only). Prerequisite: Admission to doctoral candidacy. This course is for research on the dissertation topic. May be repeated as often as approved by the supervisory committee. A maximum of twenty-four hours can be applied to the doctoral degree.

ECH 8965r. Doctoral Preliminary Exam (0). (P/F grade only.) All doctoral students must enroll in this course the semester they intend to take the qualifying exam.

ECH 8976. Thesis Defense (0). (P/F grade only.) Prerequisites: ECH 5126, ECH 5261, and ECH 5842. Corequisite: ECH 5971r. All students must register for this course for the term in which they intend to defend their thesis.

ECH 8985. Dissertation Defense (0). (P/F grade only.) Corequisite: ECH 6980r. Must be included in the final semester schedule for all doctoral students.

Graduate Department of CHEMISTRY AND BIOCHEMISTRY

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.chem.fsu.edu/>

Chair: Geoffrey F. Strouse; **Associate Chairs:** Edwin Hilinski, Susan Lattner, Wei Yang; **Professors:** Alabugin, Albrecht-Schmitt, Cross, Dalal, Lattner, Li, Logan, Marshall, Mattoussi, Miller, Roper, Saltiel, Sang, Schlenoff, Schurko, Shatrak, Steinbock, Stieglman, Strouse, Yang, Zhu; **Associate Professors:** Bleiholder, E. DePrince, Goldsby, Hanson, Hilinski, Hu, Ma, Stagg; **Assistant Professors:** Frederich, Kennemur, Lazenby, Nienhaus, Silvers, Smith; **Teaching Professors:** B. DePrince, Kearley; **Coordinator of General Chemistry Laboratories:** Dillon; **Coordinator of Organic Chemistry Laboratories:** Profeta; **Professors Emeriti:** Choppin, Clark, Cooper, DeTar, Dorsey, Dougherty, Fulton, Holton, Johnsen, Light, Linder, Mellon, Rhodes, Safron, Schwartz, Sheline, Vickers; **Professors Emerita:** Gilmer, Hoffman

The graduate program in Chemistry and Biochemistry at Florida State University was established in 1949 and is a prominent graduate program nationally and internationally. The Department offers programs leading to the Master of Science (MS) and Doctor of Philosophy (PhD) degrees in analytical, biochemistry, inorganic, organic, nuclear, materials, and physical. The Department also participates in interdisciplinary programs in materials science and molecular biophysics.

Facilities and Equipment

Department research operations are housed in the newly-opened, 168,000 square foot Chemical Sciences Laboratory and the interconnected Dittmer Laboratory of Chemistry and Molecular Biophysics buildings. These laboratory buildings house state-of-the-art facilities, instrumentation, and research laboratories. In addition, state-of-the-art University facilities, such as the Department of Scientific Computing and the National High Magnetic Field Laboratory, offer the graduate student outstanding opportunities for research. Department teaching functions are carried out in the adjacent Hoffman Teaching Laboratory and Fisher Lecture Halls.

Major research instruments and equipment available to all faculty and graduate students are housed in several specialized laboratories within the Department. Professional scientists and engineers supervise these laboratories and provide assistance and technical guidance in the use of each. The FSU NMR Facility is among the best in the Southeast region. The NMR Lab houses instruments dedicated to all types of magnetic resonance measurements. These include new Bruker 700, 600, 500 and 400 MHz spectrometers with a cryoprobe accessory available on the 700 MHz instrument. The new Bruker devices complement existing Varian 500 and 300 MHz solution instruments and a new Bruker 500 MHz wide bore system devoted to solids. The facility has a number of probes available that allow measurements on gel-phase macromolecules and any NMR-active small molecule. The magnetic characterization facility includes two Quantum Design SQUID magnetometers and a Quantum Design physical property measurement system, as well as a Bruker EPR spectrometer with X- and Q-band capabilities. The X-ray Diffraction Facility provides state-of-the-art instrumentation for structural characterization of solids. The major shared instruments for single crystal diffraction include the Bruker Apex II single-crystal diffractometer with a CCD detector and two Bruker D8 Quest X-ray diffractometers. Powder diffraction is carried out on a Panalytical X'Pert Pro powder diffraction system with a variety of sample-holder options, including hot and cold stages, or the Rigaku Ultima-III microarea powder diffraction system specifically designed for characterization of nanomaterials. The Mass Spectrometry Laboratory has the ability to obtain low-, medium-, and high-resolution mass spectra using electron impact, chemical ionization, electrospray, or matrix-assisted laser desorption ionization. Molecular spectra can be acquired on a variety of instruments: JEOL JMS-600H double focusing high resolution mass spectrometer, JEOL JMS-T100 AccuTOF time-of-flight mass spectrometer, Agilent 6870/5873 GC-MS combination, and Bruker Autoflex-III MALDI-TOF system. Stable isotope ratio analyses for C, H, N, O, and S can be obtained with a Finnigan Delta S isotope ratio GC/MS. The Biochemical Synthesis and Services Laboratory (BASS) carries out synthesis of DNA, RNA, and peptides, as well as the sequencing of proteins. Other major instrumentation available in the Department include Multi-Angle Laser Light Scattering (MALLS) and Panalytical Epsilon 3 X-ray fluorescence spectrometers for multi-element analyses of liquids and solids, Perkin Elmer Lambda 950 UV/VIS/NIR spectrophotometer with a Universal Reflectance Accessory, Perkin Elmer Spectrum 100 FT-IR spectrometer with a Universal ATR Sampling Accessory, Horiba JY Fluoromax-4 fluorometer, Edinburgh LP-980 nanosecond transient absorption, Thermo Scientific Nanodrop ND-1000 spectrophotometer, and TA Instruments thermal analysis suite. State-of-

the-art macromolecular X-ray crystallography and computational modeling facilities are located in the Molecular Biophysics building. The Department maintains excellently staffed glassworking, machine, electronics, and wood-working shops in support of teaching and research activities.

Faculty

With an active faculty of approximately thirty-five members, the Department offers a fully developed program, encompassing theoretical and experimental research in all areas of chemistry and many interdisciplinary areas. Faculty members have been widely recognized for their achievements, and count among their ranks a Nobel Laureate, members in the National Academy of Sciences, the Royal Danish Academy of Sciences, the Brazilian Academy of Sciences, and the American Academy of Arts and Sciences. Faculty members have been recipients of the American Chemical Society (ACS) Field Franklin Award for Outstanding Achievement in Mass Spectrometry, the ACS Award in Chromatography, the ACS Award in Analytical Chemistry, the ACS ExxonMobil Faculty Fellowship in Solid State Chemistry, the ACS Award for Young Investigators in Separation Science, the Air Force Young Investigator Award, the Chemical Manufacturing Association award for excellence in chemical education, National Science Foundation CAREER awards, Sloan Fellowships, Coblentz award, and numerous regional and local awards for both research and teaching. Several faculty are now American Chemical Society Fellows and Royal Society Fellows. For additional information, see the departmental Web site at: <http://www.chem.fsu.edu>.

Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

The Department offers Doctor of Philosophy (PhD) and thesis- and course-type Master of Science (MS) programs. Performance of original research is a primary characteristic of the thesis MS and PhD programs, and programs of study are correspondingly highly individualized. The PhD degree requires completion of graded classwork, graded directed individual study (DIS), oral presentations in multiple years, a written and oral candidacy exam, a written thesis with an oral defense, and publication of original research. A 3.0 grade point average must be maintained in all formal chemistry coursework.

The MS program represents a specialty tract in the Department. A handbook of information for graduate students, including specific departmental requirements, is available from the student affairs office of the Department of Chemistry and Biochemistry and on the Web site.

All graduate students in the Department must participate in teaching activities at some time during their graduate careers. To prepare students to meet this requirement, the Department offers a course in chemical education (CHM 5945) that every graduate student is expected to take. Minimum teaching requirements are listed for each of the degree programs below. Inquiries regarding departmental teaching assistantships should be directed to the graduate student coordinator in the Department of Chemistry and Biochemistry.

The ability to communicate in spoken English is a necessary component of the graduate training in chemistry. Students whose first language is not English must demonstrate competency during their first year of graduate study or participate in a course on spoken English.

Requirements for the Thesis-Type Master of Science (MS) Degree

The thesis-type program is designed to provide the student with advanced work in chemistry and experience in chemical research. Once students have selected a major professor to direct their research, a supervisory committee chaired by the major professor is formed. A course of study, consistent with University- and college-wide requirements, is formulated for each student by the supervisory committee and consists of a minimum of eighteen hours of graded classroom work and three hours of graded directed individual study (DIS). The program may consist entirely of courses in chemistry or may include courses from related areas, depending upon the interests and goals of the student. At least one semester of teaching is required. The student conducts research in consultation with the major professor and prepares a thesis with the professor's guidance. The student presents and defends the thesis before the supervisory committee.

Special Requirements for the Course-Type Master of Science (MS) Degree

The course-type program is designed to provide the student with a strong technical education, but with less emphasis on research. In this program, at least twenty-one of the University-required thirty-two semester hours of credit must be taken on a letter-grade basis at the 4000 level or above. The course-

work requirement includes eighteen hours of graded classroom coursework and three hours of graded directed individual study (DIS). A supervisory committee must be formed to guide the student.

Requirements for the Doctor of Philosophy (PhD) Degree

The heart of the PhD degree is research. The degree is granted to students who have mastered a definitive field of knowledge, who have demonstrated capacity to do original and independent scholarly investigation, and who have shown an ability to integrate their field of specialization with the larger domains of knowledge and understanding. The student will complete a minimum of eighteen hours of graded classroom work and three hours of graded directed individual study (DIS). The program may consist entirely of courses in chemistry or may include courses from related areas, depending upon the interests and goals of the student.

Within the first semester of residence in the program, students will identify a major professor to direct their research activities. In consultation with the major professor, students select a supervisory committee which will guide them in selecting programs of study and will provide evaluation by conducting the oral and written portions of the PhD preliminary examination and the defense of dissertation.

The PhD preliminary examination consists of written and oral portions. The written portion tests the student's mastery of the major field at an advanced level and consists of preparation of a research proposal outlining the student's research efforts toward completing the PhD thesis. The oral portion has two parts and consists of defense of the research proposal and the demonstration of adequate knowledge in the student's programmatic area. All the preliminary examination requirements must be completed by the seventh term in the graduate program. At the completion of the PhD candidacy a student will receive a MS degree from the Department and become a PhD candidate.

Two semesters of teaching experience are required for PhD candidates. Completion of a significant body of individual research is, of course, the chief requirement for the degree. The research results must be orally presented and defended before the supervisory committee in the defense of dissertation. In addition, a publication requirement exists in the Department for receipt of the PhD degree.

Definition of Prefixes

BCH—Biochemistry (Biophysics)

CHM—Chemistry

ISC—Interdisciplinary Sciences

Graduate Courses

Analytical Chemistry

CHM 5086. Environmental Chemistry I (3). This course focuses on the application of chemical and geochemical principles to environmental issues. Topics include: an evaluation of contaminants in surface and ground water; hydrocarbon geochemistry and petroleum contamination; waste management, including solid, toxic, and nuclear waste; air quality issues; environmental methods and instrumentation, quality assurance and quality control in environmental analysis; principles of toxicology; and risk assessment and risk management.

CHM 5087. Environmental Chemistry II (3). Prerequisite: Mastery of undergraduate organic chemistry. This course explores organic geochemistry of natural waters and sediments. It includes an overview of the sources of organic matter in aquatic systems, the important reactions and transport mechanisms that control the biogeochemical cycling of organic carbon in these systems, and the impact of naturally-occurring organic carbon on environmental and ecological processes. Attention also devoted to anthropogenic (xenobiotic) organic molecules. Discussion of how analytical techniques such as ^{13}C NMR, mass spectroscopy, optical spectroscopy, and chromatography provide useful organic geochemical information.

CHM 5138. Mass Spectrometry (3). Prerequisite: Graduate standing. This course covers principles and techniques of ion formation, focusing, collision, fragmentation, and reaction; interpretation of mass spectra; mass analyzers and ion traps; selected chemical, analytical and biological applications.

CHM 5140. Introduction to Chemical Instrumentation (3). This course is an examination of the factors that limit the accuracy, precision and speed of measurements with instruments with detailed discussions of the meaning and implications of signal bandwidth, signal orthogonality, impedance relationships, modulation and phase sensitive detection, sampling, the Fourier transform, information theory, analog signal handling with negative feedback and digital signal handling.

CHM 5151. Optical Methods of Chemical Analysis (3). This course explores fundamentals of optics (lens, prism, grating), spectroscopic instrumentation, spectroscopic techniques for chemical analysis, including atomic emission and absorption spectroscopy, molecular absorption and luminescence, infrared and Raman spectroscopy.

CHM 5153. Electrochemistry (3). This course covers instrumentation and techniques in electrochemistry, including such topics as electrode processes, potentiometry, voltammetry, and coulometry.

CHM 5154. Chemical Separations (3). This course explores the primary theme of chromatography, including gas-solid, gas-liquid, capillary gas, ion-exchange, and high-performance liquid methods. Emphasis is placed on the fundamental physical processes, modern instrumentation, and response characteristics of detectors relevant to these methods. Ancillary techniques discussed include solvent extraction, thin layer techniques, electrophoresis, field-flow fraction, and chromatographic measurements of physicochemical parameters.

CHM 5180r. Special Topics in Analytical Chemistry (1–3). May be repeated to a maximum of four semester hours.

CHM 5454. Polymer Characterization (3). This course covers the characterization of synthetic polymers by various analytical techniques, including spectroscopy, molecular weight measurements, structure, surface studies and mechanical properties. The course includes sufficient introductory material in polymer synthesis to relate structure and properties.

CHM 6190r. Analytical Chemistry Seminar (1). May be repeated to a maximum of six semester hours.

CHM 6191r. Analytical Chemistry Seminar (1). (S/U grade only). May be repeated to a maximum of six semester hours.

Biochemistry

BCH 5405. Molecular Biology (3). Prerequisite: Mastery of undergraduate biochemistry. This course discusses gene organization and replication; control of gene expression in transcription and translation; application of recombinant DNA techniques.

BCH 5505. Structure and Function of Enzymes (3). Prerequisite: Mastery of undergraduate biochemistry. This course addresses elements of protein structure and structural motifs, structure determination methods; protein folding and stability; enzyme kinetics and mechanisms; structure-function relationships.

BCH 5745. Chemical and Physical Characterization of Biopolymers (3). Prerequisite: Mastery of undergraduate biochemistry. This course covers biopolymer types and conformations; solution properties of biopolymers; macromolecular equilibria; hydrodynamic behavior; determination of size and shape; biopolymer separations; introduction to biological spectroscopy.

BCH 5884. Programming for Chemists and Biochemists (3). This course covers the fundamentals of programming using the scripting language Python and is geared towards chemistry graduate students with a need to process data in novel ways. Students are introduced to programming through the use of example problems researchers often face in chemical and biochemical research. No previous knowledge of programming is required.

BCH 5886r. Special Topics in Biochemistry and Cell Biology (1–3). May be repeated to a maximum of four times or to a maximum of twelve semester hours.

BCH 5887r. Special Topics in Biochemistry and Cell Biology (1–3). May be repeated to a maximum of four times or to a maximum of twelve semester hours.

BCH 6896r. Biochemistry Seminar (1). May be repeated to a maximum of six semester hours.

BCH 6897r. Biochemistry Seminar (1). (S/U grade only). May be repeated to a maximum of six semester hours.

Inorganic Chemistry

CHM 5442. Kinetics and Mechanisms (3). Prerequisite: Mastery of undergraduate inorganic chemistry. This course covers basic kinetics applied to common reactions in inorganic chemistry, including ligand substitution, electronic transfer and oxidation/reduction, organometallics, photophysics and photochemistry, as well as bioinorganic. Topics in kinetics cover experimental and derived rate laws, transition state theory and activation parameters, as well as operational tests for intimate mechanisms.

CHM 5620. Principles of Inorganic Chemistry (3). This course covers descriptive chemistry, including main group and transition elements, coordination and organometallic chemistry.

CHM 5680r. Current Topics in Inorganic Chemistry (1–3). This course covers group theory and vibrational spectroscopy. May be repeated to a maximum of nine semester hours.

CHM 5681r. Current Topics in Inorganic Chemistry (1–3). This course currently rotates between physical inorganic (emphasis on spectroscopic methods) and solid state chemistry (emphasis on materials). May be repeated to a maximum of nine semester hours.

CHM 6690r. Inorganic Chemistry Seminar (1). May be repeated to a maximum of six semester hours.

CHM 6691r. Inorganic Chemistry Seminar (1). (S/U grade only). May be repeated to a maximum of six semester hours.

Materials Chemistry

CHM 5450. Polymer Chemistry (3). The course covers polymers (plastics) which encompass nearly every facet of our daily lives, and the rich variety of properties and functions that characterize these materials, which is deeply seeded in the chemistry and architecture of their macromolecular structure. This course broadly surveys these materials, the current state of the field, and the modern challenges and research opportunities within it.

CHM 5715r. Topics in Materials Chemistry I (1–3). This course introduces materials chemistry, focusing on the structure, properties, and functions of metals and alloys, glasses and ceramics, semiconductors, and nanomaterials. Recommended for students involved in materials research. May be repeated within the same term to a maximum of three semester hours.

CHM 5716r. Characterization of Materials I (1–3). This course deals with microscopic and diffraction methods used for structural characterization of materials, as well as with transport and magnetic measurements. Recommended for students involved in materials research. May be repeated within the same term to a maximum of three semester hours.

CHM 5717r. Characterization of Materials II (1–3). This course deals with polymer and small molecule characterization using NMR and other physical and spectroscopic techniques. This course is comprised of lectures and a practical component performed at an instrument germane to the specific section of the course. Recommended for students involved in materials research. May be repeated within the same term to a maximum of three semester hours.

CHM 5718r. Topics in Materials Chemistry II (1–3). This course introduces materials chemistry, focusing on the structure, properties, and functions of polymers; organic and soft materials, and bio-inspired materials. Recommended for students involved in materials research. May be repeated within the same term to a maximum of three semester hours.

CHM 6936r. Materials Chemistry Seminar I (1). (S/U grade only). This course consists of a series of talks presented by the faculty and graduate students, as well as by invited speakers. May be repeated to a maximum of twelve semester hours.

CHM 6937r. Materials Chemistry Seminar II (1). This course consists of a series of research presentations and original research proposal defenses delivered by graduate students enrolled in the Materials Chemistry Program. May be repeated to a maximum of twelve semester hours.

Organic Chemistry

CHM 5225. Advanced Organic Chemistry—Structure (3). Prerequisite: Mastery of undergraduate organic chemistry. This course covers advanced description of structural stereochemistry, stereochemical aspects of reactions, theoretical aspects of structure.

CHM 5226. Advanced Organic Chemistry—Reactions (3). Prerequisite: Mastery of undergraduate organic chemistry. This course is an advanced treatment of reactions of importance in organic syntheses.

CHM 5245. Physical Organic Chemistry (3). Prerequisite: Mastery of undergraduate organic chemistry. This course covers linear free energy relationships, inductive effects, treatment of steric effects, prediction of enthalpies and entropies of formation, kinetics and potential energy diagrams, isotope effects, general acid-base catalysis, acidity functions and their use in studies of mechanisms, strategies of investigation of mechanisms.

CHM 5250. Advanced Organic Synthesis (3). Prerequisite: Mastery of undergraduate organic chemistry. This course covers retrosynthetic analysis and synthetic strategy. Applications of the following topics to total synthesis: enolate chemistry; Diels-Alder; Claisen, Cope reactions; fragmentation reactions; photochemical reactions; stereochemistry and conformational analysis; blocking and protecting groups.

CHM 5330. Graduate Survey of Organic Chemistry (3). This course is an intense survey of organic chemistry covering structure, reactions, synthesis, analysis, and spectroscopy of organic compounds. Restricted to beginning graduate students in chemistry.

CHM 5380r. Special Topics in Organic Chemistry (1–3). May be repeated to a maximum of four semester hours.

CHM 6390r. Organic Chemistry Seminar (1). (S/U grade only). May be repeated to a maximum of six semester hours.

Physical Chemistry

CHM 5440. Physical and Chemical Kinetics (3). Prerequisite: Mastery of undergraduate physical chemistry. This course includes topics such as comprehensive chemical reaction kinetics and dynamics; phenomenological rate laws; reaction mechanisms; diffusion-controlled and activation-controlled reactions; and experimental and numerical techniques for kinetic studies.

CHM 5442. Kinetics and Mechanisms (3). Prerequisite: Mastery of undergraduate inorganic chemistry. This course covers basic kinetics applied to common reactions in inorganic chemistry, including ligand substitution, electronic transfer and oxidation/reduction, organometallics, photophysics and photochemistry, as well as bioinorganic. Topics in kinetics cover experimental and derived rate laws, transition state theory and activation parameters, as well as operational tests for intimate mechanisms.

CHM 5460. Thermodynamics and Statistical Mechanics (3). Prerequisite: Mastery of undergraduate physical chemistry. This course covers the fundamentals of thermodynamics and basic concepts of quantum and classic statistical mechanics, thermodynamic functions from spectroscopic data, and gas imperfections.

CHM 5461. Advanced Statistical Mechanics (3). Prerequisite: Mastery of undergraduate physical chemistry. This lecture course covers the foundation of quantum and classical statistical mechanics; density matrix formulation; correlation functions; dense systems.

CHM 5470. Valence Theory (3). Prerequisite: Mastery of undergraduate physical chemistry. This course covers symmetry and group theory, operators and wave-mechanics; atomic orbitals; diatomic molecule electronic structure and spectra; spectral properties of polyatomic molecules.

CHM 5480. Quantum Mechanics (3). Prerequisite: Mastery of undergraduate physical chemistry. This course covers basic theoretical concepts and mathematical framework; applications to simple systems.

CHM 5481. Advanced Quantum Mechanics (3). Prerequisite: Mastery of undergraduate physical chemistry. This course covers mathematical and conceptual foundation; statistical nature of quantum theory; time dependent formulations.

CHM 5506. Physical Chemistry of Macromolecules I (3). Prerequisite: Mastery of undergraduate physical chemistry. This course covers conformational statistics of random coil polymer chains; ordered polymer structures and order-disorder transitions; thermodynamics of polymer solutions; structure-property relationships of polymers. Cross-listed under Biochemistry.

CHM 5507. Physical Chemistry of Macromolecules II (3). Prerequisite: Mastery of undergraduate physical chemistry. This course addresses principles and applications of spectroscopic methods to polymers and biological macromolecules including electronic, vibrational electron spin and nuclear magnetic resonance spectroscopy; and spectroscopic studies of dynamic systems. Cross-listed under Biochemistry.

CHM 5580r. Special Topics in Physical Chemistry (1–3). May be repeated to a maximum of four semester hours.

CHM 5581r. Special Topics in Physical Chemistry (1–3). May be repeated to a maximum of four semester hours.

CHM 5585. Experimental Methods in Physical Chemistry (3). Prerequisite: Mastery of undergraduate physical chemistry. This course offers a comprehensive survey of modern physical experimental techniques, including fundamental principles underlying the methodology and current applications of the techniques.

CHM 6590r. Physical Chemistry Seminar (1). May be repeated to a maximum of six semester hours.

Multiple Area Courses

CHM 5175r. Measurements and Data Analysis in Chemistry (1–3). This course covers fundamental concepts of measurements in chemical systems. Students study the fundamental aspects of signal detection, noise, fluctuations, and ensembles; of spectroscopy and interaction of light with matter; and of experiment design. May be repeated to a maximum of three semester hours.

CHM 5555r. Chemical Reactivity (1–3). This course covers the fundamentals of chemical reactivity, including various types of reactions and factors that govern the rate and course of chemical processes. Students study fundamentals of kinetics and thermodynamics, which forms the basis for the follow-up study of organic, inorganic, and organometallic reactivity. May be repeated to a maximum of three semester hours.

CHM 5710r. Chemical Structure and Bonding (1–3). This course covers the fundamentals of chemical bonding and structural organization of matter, including molecular orbital and ligand field theories, bonding and structure of small molecules, macromolecules, and extended solids, and theoretical approaches to electronic structures of molecules and solids. May be repeated to a maximum of three semester hours.

CHM 5801r. Safety in Scientific Research (1). (S/U grade only). This course offers a comprehensive survey of methods for the evaluation of hazards related to scientific research and strategies for the development of risk mitigation, as well as implementation of best practice techniques for lab activity management. May be repeated to a maximum of two semester hours.

CHM 5823r. Supervised Research (1–5). (S/U grade only). A maximum of three hours may be applied to a master's degree. May be repeated to a maximum of five semester hours.

CHM 5830r. Directed Individual Study (1–6). May be repeated to a maximum of sixty semester hours.

CHM 5831r. Directed Individual Study (1–6). (S/U grade only). May be repeated to a maximum of thirty semester hours.

CHM 5832r. Directed Individual Study (1–6). (S/U grade only). May be repeated to a maximum of sixty semester hours.

CHM 5833r. Directed Individual Study (1–6). (S/U grade only). May be repeated to a maximum of sixty semester hours.

CHM 5908r. Focus on Physical Chemistry (3). (S/U grade only). Prerequisite: Instructor permission. This course is a disciplinary focus group course designed to instruct graduate students on the location, analysis and interpretation of topical scientific journal articles for the purpose of communicating the content by both oral and written methodologies. May be repeated to a maximum of twenty-four semester hours.

CHM 5910. Chemical Research (3).

CHM 5911. Chemical Research (3).

CHM 5912. Chemical Research (3).

CHM 5935r. Chemistry Seminars (0). (S/U grade only). May be repeated to a maximum of ten times.

CHM 5940r. Supervised Teaching (1–5). (S/U grade only). A maximum of three hours may be applied to a master's degree.

CHM 5945. Seminar on Chemical Education (1). (S/U grade only). Prerequisite: Limited to chemistry graduate students new to Florida State University. This course is preparation for supervised teaching. Topics include safety, how to conduct classes and laboratories, exam construction, ethics of teaching, legal implications, written and oral communication of scientific material.

CHM 5971r. Thesis (1-6). (S/U grade only). A minimum of six semester hours credit is required.

CHM 6980r. Dissertation (1-12). (S/U grade only). A minimum of twenty-four semester hours is required.

CHM 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

CHM 8969r. Preliminary Doctoral Examination (0). (P/F grade only.)

CHM 8976r. Master's Thesis Defense (0). (P/F grade only.)

CHM 8985r. Dissertation Defense (0). (P/F grade only.)

ISC 5295. College Science Teaching and Learning (3-5). This course is a study of best practices for college science teaching and learning as grounded in recent recommendations from the National Research Council of the National Academy of Sciences and based on the accumulating findings of discipline-based education research on post-secondary science teaching.

**CHILD DEVELOPMENT:
see Family and Child Sciences**

Graduate Department of CIVIL AND ENVIRONMENTAL ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Website: <http://www.eng.famu.fsu.edu/cee/>

Chair: Lisa Spainhour; **Professors:** AbdelRazig, Abichou, Chen, Clark, Huang, Moses, Mtenga, Ping, Sobanjo, Spainhour, Tawfiq; **Associate Professors:** Jung, Ozguven, Rambo-Roddenberry; **Assistant Professors:** Choi, Dulebenets, Tang, Zhang; **Teacher Professor:** Adalier; **Associate Teaching Professors:** Ahmad, Pamuk; **Teaching Faculty I:** Kampmann; **Professor of Practice:** Martin; **Professors Emeriti:** Dzurik, Nnaji, Wekezer

The department offers a Master of Science (MS), Master of Engineering (MEng), and a Doctor of Philosophy (PhD) program with concentrations in structural, geotechnical, transportation, construction, water resources, and environmental engineering. Special areas of emphasis in civil engineering are bridge design, bridge management systems, cementitious materials, construction management, and wind engineering; geo-environment and pavements; transportation networks and multimodal systems; disaster resilience; and computer-aided design and decision support systems as well as the integration of physical and numerical models of civil engineering systems. In water resources, the focus is on hydraulics, hydrology, hydrodynamics, groundwater, and the modeling of watersheds and coastal areas. Emphasis within environmental engineering includes water quality, drinking water and wastewater treatment, remediation, hazardous waste management, environmental systems analysis, and environmental sustainability.

Centers and Laboratories

The college has many instructional and research laboratories. Specific laboratories for the Department of Civil and Environmental Engineering are geotechnical, environmental, hydraulic, pavement, construction materials, structures, and the transportation-engineering laboratory.

Geotechnical laboratory facilities include equipment for soil classification, compaction, hydraulic conductivity, slurry evaluation, shear strength, and compressibility of soils. Electronic data acquisition systems, personal computers, sampling devices, and a machine shop are also available for student use.

The environmental engineering laboratories include both an undergraduate teaching lab and a graduate research lab. The facilities include equipment and instrumentation needed for physical, chemical, and microbiological analysis of water quality, sampling and filtering devices, and space for bench scale experiments.

The hydraulic laboratory is used by students to reinforce the basic concepts of hydraulics and become familiar with hydraulic equipment and instrumentation, and to learn procedures of data collection and analysis. Students can perform experiments of hydrostatic pressure, hydrostatic forces on submerged bodies, flow measurement, friction in pipe flow, pump power, open channel flow, hydraulic jump, and wave mechanics.

The materials and structures laboratory, two stories high, includes equipment for compression strength testing, concrete, mixer, L.A. abrasion test machine, MTS test system, and electronic data acquisition systems. The lab has a three-foot reinforced concrete reaction slab with 100-kip anchorage pods spaced at four-foot intervals. This facility provides undergraduate and graduate students with applied instruction on specialized testing of materials and structures, support for high quality research in developing and testing innovative structural materials and systems for bridges, buildings, etc.

The multi usage laboratory supports preparation of specimens for other laboratories. It also has an open-circuit wind tunnel with a twenty-four-inch square cross section.

The department houses the Center for Accessibility and Safety for an Aging Population (ASAP), a Tier I University Transportation Center (UTC), funded by the United States Department of Transportation (USDOT). ASAP concentrates its efforts on Florida where it is projected that twenty-two percent of the population will be 65 or older by 2020, the highest percentage in the nation, but the Center's research is valuable in addressing transportation issues for an aging population nationwide. The Center addresses two of USDOT's strategic goals: improving highway safety and strengthening transportation planning. Providing seniors with safe and convenient access to the goods and services they need to participate fully in society is a key issue explored by ASAP personnel. The Center also focuses on transportation issues of rural and minority segments within the elderly population. The Center focuses on four interdisciplinary areas: (1) Accessibility and community connectivity among older adults; (2) Human factors affecting the older population, especially regarding acceptance of emerging technologies; (3) Geometric design research, especially regarding elder crash mitigation; and (4) Health, wellness, and safety of seniors as it relates to multimodal transportation and emergency op-

erations. ASAP also supports educational and outreach activities, including an annual Transportation Day, brown bag lunches, student research seed grants and dissertation fellowships, and annual student research colloquia.

Additionally, the department manages a large research program called TraCS Florida. This program is funded by a grant from the Florida Department of Transportation (FDOT) to provide Florida law enforcement agencies (LEAs) with a cost effective (FREE) way to collect and transmit electronic crash and citation data, to submit crash data electronically to the Florida Department of Highway Safety and Motor Vehicles (DHSMV), and to submit citation data to local county clerks of court. The TraCS Florida team uses TraCS to develop Florida specific forms to meet the data submission requirements set by DHSMV.

Computer and Other Resources

Students have access to a large number and variety of computer systems. A network of nearly 700 computing devices is available for the academic and research efforts of the college.

The college computers are connected to a high-speed, switched, fiber-optic LAN and to the Internet via the Florida State University connection to the NSF v BNS network. Other computation resources include the Department of Scientific Computing, FSU Academic Computing and Network Services (ACNS), and FAMU Computing Services.

A small collection of reference works and heavily used books and journals is located in the College of Engineering Reading Room/Library Services.

Students may also participate in engineering clubs such as the National Society of Black Engineers (NSBE); Society of Women Engineers (SWE); American Society of Civil Engineers (ASCE); Institute of Transportation Engineers (ITE); Engineering Honor Society, Tau Beta Pi; Engineers Without Borders (EWB); and the Society of Hispanic Professional Engineers (SHPE).

Master's Admission Requirements

Admission requirements for the Master of Science (MS) program, which includes the MS thesis and Master of Engineering (MEng) options, include the following:

1. A baccalaureate degree in civil engineering, or an allied academic discipline, from an accredited college or university. International students must have a Bachelor of Science (BS) degree in civil engineering from a recognized academic institution;
2. Good standing in the academic institution last attended;
3. A grade point average (GPA) of 3.0 on a 4.0 scale, on all work attempted while registered as an upper division student (beyond sixty semester hours of undergraduate work);
4. A minimum graduate record examination (GRE) percentile rank of 25% on the verbal reasoning section and 65% on the quantitative section. For the MEng option, evidence of passing the NCEES Fundamentals of Engineering (FE) or Principles and Practice of Engineering (PE) exam or holding PE licensure in any state may be used in lieu of the GRE;
5. The following minimum score on the Test of English as a Foreign Language (TOEFL) for all international applicants whose native language is not English: 550 (paper-based), 213 (computer-based), or 80 (Internet-based);
6. Three letters of recommendation; and
7. An essay of intent stating goals and reasons for pursuing the master's degree.

Doctoral Admission Requirements

Admission requirements for the Doctor of Philosophy (PhD) degree include the following:

1. A Bachelor of Science (BS) or Master of Science (MS) degree in civil or environmental engineering or a closely related field;
2. A grade point average (GPA) of 3.0 on a 4.0 scale for all undergraduate and graduate work;
3. A minimum graduate record examination (GRE) percentile rank of 35% on the verbal reasoning section and 70% on the quantitative section;
4. A minimum score of 550 (paper-based), 213 (computer-based), or 80 (Internet-based) on the Test of English as a Foreign Language (TOEFL) if their native language is not English;
5. Three letters of recommendation;
6. An essay of intent stating goals and reasons for pursuing the PhD degree; and
7. If requested, an interview by the Graduate Committee or its representatives.

Master's Degree Requirements

The MS thesis option requires twenty-four semester hours of coursework and six semester hours of thesis work. The MS thesis option requires a final oral examination in which the student defends a thesis. For the MS thesis option, the general course requirements include twelve to fifteen hours in the depth area, six to nine hours in supplementary electives, and three hours of advanced mathematics or statistics. Students also must register in a non-credit graduate seminar course each semester. The MEng option requires thirty semester hours of coursework, consisting of fifteen hours in the specialty area, twelve hours in supplementary electives, and three hours of advanced mathematics, statistics, or computation.

For both the MS thesis and MEng options, a maximum of six semester hours of graduate coursework, in which the student earned a grade of "B" or better, may be transferred from another program. Courses sponsored by other universities, taken through the Florida Engineering Education Delivery System (FEEDS) should account for no more than fifty percent of the student's coursework. Each individual program is designed with the approval of a major advisor and, for the MS thesis option, a supervisory committee. The general course requirements for the MS thesis and MEng options are given below.

Course Distribution	MS	MEng
Specialty (Depth) area	12–15	12–15
Supplemental electives	6–9	12–15
Advanced mathematics	3	3
Thesis with oral defense	6	N/A
Non-thesis project with oral defense	N/A	N/A
Graduate seminar	0	N/A
Total credit hours required for the master's degree	30	30

Graduation requirements include a cumulative grade point average of 3.0 or better and the successful defense of a thesis (MS) for the thesis option. All of the above requirements must be met within seven calendar years.

B.S. – M.Eng. Pathway

This pathway provides academically talented undergraduate students an opportunity to complete both a bachelor's and a master's degree in 5 years. Upon approval, this pathway allows 6 graduate hours to be double-counted toward an undergraduate degree program. The student will earn the Bachelor of Science (BS) degree upon completion of the undergraduate program and the Master of Engineering (MEng) degree upon completion of the graduate program.

The program requirements for the graduate portion of this pathway are identical to the M.Eng. program requirements shown above. The only difference is that the pathway students take 24 hours of coursework instead of 30 hours, because 6 graduate hours were already taken while getting the undergraduate degree.

The admission for the B.S. – M.Eng. Pathway has two parts:

1. When the student is in the undergraduate program, the student submits an on-line application to the combined degree pathway. Overall GPA of 3.2 as well as area-specific requirements must be met. To ensure smooth transition to the graduate program, it is recommended that the students apply during Terms 5 or 6 (the Junior year) according to the CEE Undergraduate Academic Map. Additional information and the online application is available at <https://eng.famu.fsu.edu/cee/bs-ms-pathway>.
2. During the last year as an undergraduate, the student applies to the Master of Engineering program. The admission requirements for this step are identical to the master's admission requirements shown earlier.

Doctoral Degree Requirements

The program of study for the PhD degree is flexible and depends on the individual student's background and objectives. The CEE department has two tracks for the PhD program. The typical track is the MS-PhD track where the applicants already have an MS degree. An alternative is the BS-PhD track where exceptionally-qualified applicants who are well prepared may enter the PhD program with only a BS degree. A student may specialize in any of the several areas that are offered in the department. In addition to the specialty courses, the student must have a minor consisting of at least nine semester hours from another department. Each student's specific program of study is uniquely tailored through consultation with an advisory committee that the student selects. The objectives of course selection are to develop a broad-based understanding of engineering and science, and to gain fundamental contemporary capabilities in an area of concentration necessary to conduct significant and original scholarly research.

A student must choose a major professor by the second semester of enrollment in the PhD program. If a student has not chosen a major professor

by this time, a professor approved by the graduate committee chair will act as the student's academic advisor. The major professor is formally appointed by the department chair and will serve as chair of the supervisory committee. The supervisory committee is formally appointed by the department chair at the request of the major professor. There must be a minimum of four committee members, including the major professor. One member must be from outside the department, representing the student's minor. The committee supervises the student's work until all degree requirements are completed and is responsible for an annual written assessment of the student's progress. This assessment shall be made available to the student, the coordinator of graduate studies, and the department chair.

The student will prepare, with the approval of the doctoral supervisory committee, a complete plan of study to be submitted to the graduate committee within the first year of the program and to be retained on file in the department. The plan should identify the courses necessary to meet the following semester hours of course requirements and a time schedule for taking them. Degree requirements for PhD students are outlined below.

The PhD course requirements include nine hours in a student's depth area, nine to eighteen semester hours beyond the master's degree in supplementary electives, up to nine semester hours in a non-departmental minor area, and twenty-four semester hours of original dissertation work. Students also must register for a noncredit graduate seminar course each semester.

Students admitted with:	MS Degree	BS Degree
Articulation/other requirements	0–22	6–22
Depth area	9	21
Supplementary electives	9–18	18
Minor courses	0–9	0–9
Dissertation	24	24
Graduate seminar	0	0
Total credit hours for the doctoral degree	51	69

Following completion of a major portion of the coursework defined in an approved plan of studies, the doctoral supervisory committee must issue certification that the student has: maintained a minimum of 3.0 GPA; demonstrated sufficient progress toward mastery of a sub-discipline; and developed a command of requisite research tools to begin independent research in the area of the proposed dissertation. Once certified, students will be permitted to take a doctoral preliminary examination.

The preliminary examination will be a written and oral exam prepared by the student's supervisory committee. The exam will be administered by the committee near the end of or after completion of the student's coursework and will comply with the requirements of the college and the university in which the student is registered. The examination committee shall report the outcome to designated college and university authorities as: "passed," "failed," "additional work to be completed," or "to be reexamined." Students are admitted to candidacy for the PhD degree only after passing this examination. If any student requires re-examination, the outcome can only be reported pass or fail. Any student who fails re-examination is dismissed from the program. Upon successful completion of the second trial the student may continue to register for dissertation hours.

The most important element of the doctoral program is original and fundamental research resulting in a doctoral dissertation. The research subject is selected by the student in consultation with the major professor and the student's doctoral supervisory committee. The dissertation must be completed on a topic approved by the Committee. To be acceptable, it must comprise original research constituting a significant contribution to knowledge and represent a substantial scholarly effort on the part of the student. The defense of the dissertation will be oral. The doctoral supervisory committee and other members of the faculty as appointed by the academic dean or specified by the university regulations will conduct the examination. Publication of the dissertation shall conform to the regulations of the university through which the student is registered.

Applicants holding degrees in areas other than civil engineering, or closely allied fields, will be required to take coursework beyond the minimum requirements for the master's degree. Graduation requirements include a cumulative grade point average of 3.0 or better and the successful defense of a thesis or project report for the master's degree, and a grade point average (GPA) of 3.0 or better and the successful defense of dissertation for the PhD degree. All of the above requirements must be met within seven calendar years.

Assistantships/Financial Aid

Students may be supported through research or teaching assistantships on a competitive basis. Most graduate students currently hold half-time assistantships equivalent to twenty hours per week. Graduate assistants also receive tuition waivers from the universities on a competitive basis. Inquiries about

research assistantships should be made to the professor directing an individual research project of interest to the student. Please visit the department Web site to learn more about individual faculty research. The department chair should be contacted about prospects of teaching assistantships. For other financial and scholarship opportunities, contact the FAMU Office of Financial Aid and Scholarships at (850) 599-3730, or online at <http://www.famu.edu/index.cfm?FinancialAid>. To access the status of your financial aid information, please contact FSU at (850) 644-0539 or on the Web at <https://financialaid.fsu.edu>.

Contact the admissions office for application materials. For information on financial assistance contact the *Department of Civil and Environmental Engineering, FAMU-FSU College of Engineering, 2525 Pottsdamer Street Rm A129, Tallahassee, FL 32310-6046*, phone: (850) 410-6136.

Definition of Prefixes

CCE—Civil Construction Engineering
 CEG—Civil Geotechnical Engineering
 CES—Civil Engineering Structures
 CGN—Civil Engineering
 CWR—Civil Water Resources
 EGN—Engineering: General
 ENV—Engineering: Environmental
 TTE—Transportation Engineering

Graduate Courses

Construction Engineering

CCE 5035. Construction Planning and Scheduling (3). Prerequisite: CCE 4004. This course covers topics such as planning, basic arrow diagramming, basic precedence diagramming, establishing activity duration, scheduling computations, bar charts, project controls, overlapping networks, resource leveling, and program evaluation review technique (PERT).

CCE 5036. Project Controls in Construction (3). Prerequisite: Instructor permission. This course includes topics such as construction cost estimation, work breakdown structure, and cost control; critical path method (CPM) scheduling, resource-constrained scheduling, and integrated scheduling-cost control; probabilistic scheduling techniques and linear scheduling techniques; modeling and analysis of construction operations.

CCE 5212. Sustainable and Green Construction (3). This course provides a comprehensive overview of the basic principles of sustainability and green construction. The course provides detailed background about the green building (LEED) certification, as well as energy calculations and cost-benefit analysis.

CCE 5510. Computer Applications in Construction (3). Prerequisite: CCE 4004. This course provides a comprehensive review and application of basic and advanced pertinent computer software for construction engineering and management. The course emphasizes practical applications for construction project management.

Geotechnical Engineering

CEG 5015. Advanced Soil Mechanics (3). Prerequisite: CEG 3011. This course explores the mechanical behavior, internal stresses, and stability analysis of noncohesive soils, compressibility, consolidation, and settlement of cohesive soils, analytical techniques for predicting earth movement.

CEG 5115. Foundation Engineering (3). Prerequisite: CEG 4801. This course covers topics such as the design of spread footings, pile and caisson foundations, retaining structures, and waterfront structures. The course also investigates slope stability and appropriate selection of alternative design methods of foundation.

CEG 5127. Highway and Airport Pavement Design (3). Prerequisite: CEG 4801. This course focuses on the analysis of materials used for highway and runway pavements; design of rigid and flexible pavements and sub-bases for highways and airports; geotechnical considerations.

CEG 5515. Earth Retaining Systems and Slope Design (3). Prerequisite: CEG 4801 or instructor permission. This course covers the design of systems such as sheet pile walls, segmental walls, and dewatering systems. Students have a choice between alternative design methods, including software applications.

CEG 5705. Environmental Geotechnics (3). Prerequisite: CEG 3011. This course focuses on the geotechnical aspects of waste containment and storage. Aspects of design, construction, and performance of earthen structures for storing or disposing waste or remediating contaminated sites.

Structural Engineering

CES 5105. Advanced Mechanics of Materials (3). Prerequisites: CES 3100 and EGN 3331. This course offers an analysis and design of load-carrying members, shear center, unsymmetrical bending, curved beams, beams on elastic foundations, energy methods, theories of failure, thick-walled cylinders, as well as stress concentrations.

CES 5106r. Advanced Structural Analysis (3). Prerequisites: CES 3100 and EGN 3331. This course covers matrix algebra review, direct stiffness method for truss analysis, computer applications, statically indeterminate structures, slope-deflection and moment distribution methods, and computer modeling and analysis of structures using commercial FE codes. May be repeated to a maximum of six semester hours.

CES 5144. Matrix Methods for Structural Analysis (3). Prerequisites: CES 4101 and MAP 3305 or MAP 2302. This course covers selected fundamental techniques, including energy methods, for the formulation of the stiffness method for structural analysis. Topics include the formation of element matrices, transformed element matrices, structure stiffness matrices, and equations of equilibrium. Selected computer solution techniques are also covered.

CES 5209. Structural Dynamics (3). Prerequisites: CES 4101 and MAP 3305 or MAP 2302. This course covers analysis and design of single- and multi-degree-of-freedom structures subjected to various types of excitations and initial conditions. Topics include computational aspects of dynamic analysis, including approximate methods of analysis, and introduction to earthquake loading and design.

CES 5218. Fundamentals of Structural Stability Theory (3). Prerequisite: CES 4101. This course explores the elastic and inelastic buckling of columns including large deformation theory and imperfect columns, beam column theory, and buckling of frames. Methods of analysis include the formation and solution to differential equations, energy methods, and matrix methods. AISC stability design techniques are used with LRFD format. Computer software is used as a teaching tool.

CES 5325. Bridge Engineering (3). Prerequisites: CES 4605 and CES 4702. This course is an introduction to design of modern steel and concrete highway bridges. Topics include materials and properties, loads on bridges, and substructure design. AASHTO LRFD specifications are used.

CES 5585. Wind Engineering (3). Prerequisites: CES 4101 and MAP 3305. This course covers statics and dynamics of wind-induced loads and structural responses. Topics include wind damage, extreme wind probability, wind characteristics, wind pressure and forces, basics of single DOF structural dynamics, and overview of wind dynamics. State-of-the-art research in wind engineering is also introduced.

CES 5606. Advanced Steel Design (3). Prerequisites: CES 4101 and CES 4605. This course explores the behavior of complex steel elements and structures. Topics include analysis and design of columns and beams under combined effects of flexure, shear and torsion. Other topics include lateral torsional buckling, plastic analysis, design of plate girders, and design of frames.

CES 5706. Advanced Reinforced Concrete Design (3). Prerequisites: CES 4101 and CES 4702. This course explores the behavior of advanced reinforced concrete structures. Topics include analysis and design for torsion, biaxial columns, slender columns, two-way slabs, retaining walls, shear walls, deep beams, the art of detailing, and the strut-and-tie method.

CES 5715. Prestressed Concrete (3). Prerequisites: CES 3100 and EGN 3331. This course covers the behavior and design of prestressed concrete structures. Topics include the design of prestressed concrete beams for flexure and shear, design of slabs, prestressing losses, serviceability of prestressed concrete members, and precast members.

CES 5801. Structural Design of Wood Structures (3). Prerequisite: CES 3100 or instructor permission. This course includes analysis and design of beams, columns, connections, diaphragm and shear walls using sawn timber, laminated timber, and structural panels such as plywood and sheathing panels.

CES 5845. Composites in Civil Engineering (3). Prerequisites: CCE 3101, CES 3100, and EGN 3331. This course covers fundamental theories of composite materials. Topics include forms of composites and their reinforcements; physical, chemical, and mechanical properties; design and testing methods; and civil engineering applications of composite materials.

CES 6116. Finite Elements in Structures (3). Prerequisites: CES 4101 and MAP 3305 or MAP 2302. This course covers basic concepts of finite element analysis. Topics include boundary conditions; computer techniques used in structural analysis; structural finite elements for trusses, beams, beams on an elastic foundation, and frames; plane stress and plane strains in triangular elements; and engineering modeling.

Hydraulic/Water Resources Engineering

CWR 5125. Groundwater Hydrology (3). Prerequisites: CWR 3201 and EES 3040. This course examines the fundamentals of groundwater flow and contaminant transport. Topics include: Darcy's law, flow nets, mass conservation, heterogeneity and anisotropy, storage properties, 3-D equation of groundwater flow, regional recirculation, unsaturated flow, recharge, stream-aquifer interaction, well hydraulics, slug test analyses and contaminant transport processes.

CWR 5205. Hydraulic Engineering II (3). Prerequisites: CWR 4202 and MAP 3305 or MAP 2302. This course presents advanced hydraulic concepts and their incorporation into the design process. Methods of solving such problems are also presented.

CWR 5635. Water Resources Planning and Management (3). Prerequisites: CWR 4101 and CWR 4202. This course examines the quantity and quality planning of water resources systems. Economic considerations.

CWR 5824. Coastal and Estuarine Hydraulics (3). Prerequisites: CWR 3201 and MAC 2313. This course examines numerous topics including coastal hydraulic principles and waves in estuaries and coastal oceans, wave properties and wave forces on coastal structures, tidal motions, mixing and transport in estuaries, and coastal engineering analysis.

Environmental Engineering

ENV 5028. Remediation Engineering (3). Prerequisite: ENV 4001 or equivalent. This course reviews various innovative remediation technologies used for cleanup of contaminated soil and groundwater at a site such as air sparging, soil vapor extraction, reactive walls, reactive zones, stabilization technologies, hydraulic pneumatic fracturing and pump-and-treat systems.

ENV 5030. Applied Environmental Engineering Microbiology (3). Prerequisite: ENV 4001 or equivalent. This course focuses on the survey of environmentally important microbes and the roles they play in environmental restoration processes. Major topics include basics of microbiology, stoichiometry and bacterial energetics, bioremediation and other environmental microbiology applications, and detoxification of hazardous chemicals.

ENV 5045. Environmental Systems Analysis (3). Prerequisites: ENV 4001 and MAC 2311. In this course, systems analysis techniques are applied to the solution of environmental problems, with particular emphasis on linear and dynamic programming.

ENV 5055. Chemical Fate and Transport in the Environment (3). Prerequisites: CWR 3201, EES 3040 or equivalent, and MAP 3305 or MAP 2302. This course focuses on the study of the processes of pollutant chemicals transformation in and transport between air, water, and soil or sediments. Use and development of predictive mathematical models for the remediation of existing contaminated sites or prevention of future contamination from new sources.

ENV 5076. Environmental Law for Engineers and Scientists (3). This course is an introduction to environmental law and policy suitable for students pursuing engineering and science majors. The course addresses major federal environmental laws and environmental permitting and develops critical thinking skills through the exploration of contemporary and sometimes controversial issues such as climate change, environmental justice, hydraulic fracturing, trade, and the environment, and international environmental law.

ENV 5105. Air Pollution Control (3). Prerequisite: ENV 4001. This course investigates analytical concepts for determination of sources, amounts, and transport of air pollutants; health and environmental effects; design of control devices and management programs.

ENV 5407. Water Reuse Engineering (3). Prerequisite: ENV 4001 or equivalent. This course covers wastewater reclamation and reuse; treatment processor and systems; monitoring and control instrumentation; health and social aspects; design of facilities/systems.

ENV 5419. Applied Environmental Engineering Chemistry (3). This course covers applications of fundamental principles from general, organic, and biological chemistry to major environmental engineering processes. Emphasis is placed on the chemistry of water treatment.

ENV 5504. Environmental Engineering Processes and Operations (3). Prerequisite: ENV 4001 or instructor permission. This course focuses on the operational and design features of the physical, chemical, thermal, and biological treatments used in engineering for the management of solid and hazardous wastes.

ENV 5565. Design of Water Quality Management Facilities (3). Prerequisites: CWR 3200L, CWR 3201, and EES 3040. This course is an analysis of operations, processes, and systems used in the design of facilities for maintaining water supply quality, wastewater control, and aquatic pollution control. Design of wastewater collection systems, water and wastewater treatment plants, and systems for disposal for residuals from such facilities.

ENV 5615. Environmental Impact Analysis (3). Prerequisites: CWR 3200L and EES 3040. This course is an analysis of various measures of environmental quality. Impacts on different types of resources. Benefit-cost in environment impact assessment.

ENV 5617. Environmental Engineering Sustainability (3). This course explores theory in the field of environmental sustainability and green engineering; material also covers sustainability in relation to other disciplines, but focuses on environmental and engineering concepts.

Transportation and Traffic Engineering

TTE 5074. Freight Terminals and Distribution Facilities (3). Prerequisite: Instructor permission. This course covers a general overview of passenger and freight transport, an overview of operations within different types of freight transportation terminals: marine terminals (container, dry bulk, liquid bulk), cross-docking facilities, warehouses, rail terminals, freight airport terminals, and other freight transportation facilities. The course analyzes decision problems within freight terminals, operations optimization, maximization of the terminal throughput and associated monetary benefits. Students discuss future needs of freight transportation.

TTE 5205. Traffic Engineering (3). Prerequisite: TTE 3004 or equivalent. This course focuses on the nature, characteristics, and theories of traffic flow. The course also discusses street and highway traffic problems, traffic survey procedures, origin-destination studies, theory and design of automatic control of traffic systems, and transit systems.

TTE 5206. Advanced Traffic Flow Analysis (3). Prerequisite: TTE 3004. This course covers microscopic and macroscopic characteristics, traffic stream models, demand-supply analysis, shockwave analysis, queuing analysis, computer simulation models, and intelligent transportation systems.

TTE 5256. Traffic Operations (3). Prerequisite: TTE 3004. This course covers principles of capacity, freeways, rural highways, urban streets, transportation systems, and computer simulation.

TTE 5270. Intelligent Transportation Systems (3). Prerequisite: TTE 3004. This course covers advanced traffic management systems (ATMS), advanced traveler information systems (ATIS), advanced vehicle control systems, commercial vehicle operations, rural ITS human factors, institutional issues, architecture and standards, simulation, and modeling.

TTE 5305. Transportation Systems Analysis (3). Prerequisite: TTE 3004 or equivalent. This course provides an extensive introduction for complex multi-modal transportation systems and their components with a focus on transportation planning, economics, modeling, investment, operations, and maintenance. Topics covered include network analysis, optimization techniques, demand and supply models, simulation practices, planning and forecasting models and other social, political, and economic aspects of the transportation system. Emphasis is given to the tie between the theory and practice with a focus on the sustainability and resiliency of the critical infrastructure.

TTE 5501. Transportation Economics (3). Prerequisite: TTE 3004 or equivalent. This course provides an introduction to transportation economics and financial aspects of transportation policy and planning, stressing the demand, supply and other economic issues. Microeconomics concepts that are critical for transportation systems will be extensively studied with a focus on the transportation demand and supply models, discrete choice analysis, cost models, traffic congestion and pricing.

TTE 5805. Highway Geometric Design (3). Prerequisites: CEG 2202, CEG 2202L, and TTE 3004. This course goes over the principles and procedures for the geometric design of highways and streets. The course also includes considerations of traffic, land use, and aesthetic factors.

Other Courses

CGN 5310. Engineering Data Systems (3). This course focuses on conceptual data modeling; application and use of relational database management systems and geographical information systems; introduction to modern conceptual tools (genetic algorithms, neural networks, etc.); completion of individual projects applying course knowledge to sub-disciplines within the civil engineering program, according to student interest.

CGN 5825. Site Development (3). Prerequisites: CEG 2202, CEG 2202L, CWR 4202, CWR 4203, TTE 3004, TTE 4201, or TTE 4804 or equivalents. This course is a practice-oriented land development design course integrating geometric layout, earthwork grading, storm water management, potable water distribution, wastewater collection, regulatory compliance, and financial considerations.

CGN 5905r. Directed Individual Study (1–6). (S/U grade only). May be repeated to a maximum of six semester hours when topics change.

CGN 5910r. Supervised Research (1–5). (S/U grade only). May be repeated to a maximum of five semester hours and a maximum of three semester hours may apply to the master's degree.

CGN 5930r. Special Topics (1–6). This course covers special topics in civil engineering with emphasis on recent developments. May be repeated to a maximum of six semester hours. Consult instructor.

CGN 5931r. Mechanical Engineering Comprehensive Exam (0). (P/F grade only.) All Masters of Engineering students must enroll in the course the semester they intend to graduate. May be repeated once.

CGN 5935. Civil Engineering Seminar (0). (S/U grade only). Prerequisite: graduate student status. Graduate students are expected to enroll in the course every semester they are enrolled at FAMU or FSU. The students should attend at least seventy-five percent of the seminars offered each semester to obtain a satisfactory grade.

CGN 5971r. Master's Thesis Research (1–12). (S/U grade only). This course provides a means of registering for thesis research work and recording progress toward its completion. Student must consult with the academic department for appropriate registration of course credit hours. May be repeated to a maximum of forty-five (45) credit hours; repeatable within the same term.

CGN 6942. Supervised Teaching (3). (S/U grade only). Prerequisite: Doctoral candidate status. Students receive credit for teaching an undergraduate course under supervision of graduate faculty.

CGN 6972. Master's Thesis Defense (0). (P/F grade only.) Prerequisite: CGN 5971. Required of students enrolled in the master's thesis option. Students must register in the semester they plan to defend their thesis.

CGN 6980r. Dissertation (1–24). (S/U grade only). Prerequisite: Doctoral candidate status. This course provides a means of registering for dissertation and recording progress toward completion. A dissertation representing twenty-four semester hours of academic work is a requirement for the PhD degree in civil engineering. May be repeated as often as approved by the supervisory committee. A maximum of twenty-four semester hours may be applied toward the PhD degree.

CGN 8985r. Dissertation Defense (0). (P/F grade only.) Prerequisite: Doctoral candidate status. Must be included in the final semester schedule for all doctoral students. May be repeated once.

CGN 8988r. Doctoral Preliminary Exam (0). (P/F grade only.) All doctoral students must enroll in the course the semester they intend to take the qualifying exam. May be repeated once.

EGN 5458. Statistical Applications for Engineers (3). Prerequisites: STA 2122, MAC 2311, MAC 2312, and MAC 2313 or equivalent. This course provides rigorous introduction to fundamentals of data analysis and statistics motivated by engineering applications with the use of modern software. Emphasis is placed on real-world applications to engineering problems.

EGN 5465. Applied Simulation Modeling of Transportation Systems (3). This course is an overview of simulation as a modeling approach, analysis of complex transportation systems using simulation, evaluation of distribution/transportation processes, discrete/continuous/hybrid simulation, disruptive simulation, development of custom simulation logics, programming within simulation, scenario analysis automation.

EGN 5480. Metaheuristics and Hybrid Algorithms (3). Prerequisites: Instructor permission. This course covers problem complexity, review and design of metaheuristics, evolutionary computation, local search heuristics, exact optimization procedures, hybridization techniques.

EGN 5950. Research Methods in Engineering (3). This course introduces graduate students to standard and advanced procedures and tools for scientific and engineering research. The course provides or expands the required knowledge for respectable research work, documentation, and presentation. It exposes students to the all/most stages generally needed for empirical and analytic engineering research. Students work closely with the instructor to ensure all assignments are based on individual needs, such that guidance for thesis or dissertation research and writing can be provided.

**CIVIL ENGINEERING/CONSTRUCTION/STRUCTURES/
GEOTECHNICAL/ENVIRONMENTAL/HYDRAULIC AND
WATER RESOURCES/TRAFFIC AND TRANSPORTATION:
see Civil and Environmental Engineering**

**CLASSICAL AND ANCIENT STUDIES:
see Classics; History**

Graduate Department of CLASSICS

COLLEGE OF ARTS AND SCIENCES

Website: <http://classics.fsu.edu/>

Interim Chair and Leon Golden Professor: Marincola; **M. Lynette Thompson Professor:** de Grummond; **Professors:** Cairns, Fulkerson, Pullen; **Associate Professors:** Clark, De Giorgi, Luke, Pfaff, Sickinger, Slaveva-Griffin, Stover; **Assistant Professors:** Lewis, Murphy, Weiberg; **Associate Teaching Professor:** Branscome; **Assistant Teaching Professor:** Furman; **Professors Emeriti:** Golden, Plescia

The Department of Classics is committed to advancing our knowledge and critical appreciation of the ancient Mediterranean world through excellence in research and in teaching. The department seeks to create an atmosphere that fosters traditional scholarly approaches to the classical past while at the same time welcoming and encouraging innovative methods and perspectives. The department values the interdisciplinary nature of the classics and strives to achieve an integrated understanding of the ancient world that includes a full appreciation of history, literature, and material culture. Students are encouraged to view the classics within the context of the traditional humanities as well as in terms of the contemporary criticism of received cultural canons.

The faculty in Classics is distinguished in teaching and research. Several members of the faculty have received university and national teaching awards. Research strengths lie in ancient literature, particularly poetry, the archaeology of Greece and Italy, and the political and social history of Athens and of Rome. The department administers the Langford Family Eminent Chair in Classics, which brings distinguished classicists to campus, and it plays host to two major conferences each year, the Langford Seminar in the fall and the Langford Conference in the spring. It also welcomes distinguished classicists from the U.S. and abroad to its lecture program, which includes the endowed Hunter Lecture. The department's Thompson Library houses a full collection of Classics resources for students and faculty, and graduate students have access to up-to-date computing facilities and software. Graduate students can participate in archaeological fieldwork conducted by faculty members in Italy and Greece, while other opportunities for fieldwork and overseas study are available in Italy, Greece, and elsewhere.

The department enjoys a close relationship with other departments in the University, especially art history, anthropology, history, interdisciplinary humanities, philosophy, and religion, each of which offers graduate level courses of interest to classicists.

The Department of Classics offers several programs of graduate study leading to the MA and PhD degrees. MA programs are offered in Classical Archaeology, Classical Civilizations, Classics (Greek and Latin), Greek, Latin, and Ancient History. The focus of each program differs, but all are designed to prepare students for teaching careers in secondary schools or to help students develop the skills necessary for study at the PhD level. Students also have the opportunity to work toward certification in Museum Studies. The PhD program has concentrations in Classical Archaeology or Classical Philology and trains students to become teachers and scholars at the college or university level. Students work closely with the director of graduate studies and departmental faculty to design a graduate program which meets their personal and professional requirements.

Admission Requirements

The minimum admission requirements for all programs leading to the MA are:

1. A Bachelor of Arts (BA) degree;
2. A 3.0 undergraduate grade point average (GPA) in all upper-division work;
3. A GRE score in the 90th percentile or higher on the Verbal section (estimated to be 162 or higher) and no less than the 50th percentile (approximately 150 or higher) on the quantitative portion of the GRE;
4. Sufficient undergraduate work in Classics to warrant study on the graduate level.

The minimum requirements for admission to the doctoral program are:

1. A Bachelor of Arts (BA) or Master of Arts (MA) degree in Classics or related field;
2. A 3.6 GPA overall and 3.8 GPA in upper division coursework;
3. A GRE score in the 90th percentile or higher on the Verbal section (estimated to be 162 or higher) and no less than the 50th percentile (approximately 150 or higher) on the quantitative portion of the GRE;

4. Sufficient language skills in Greek and Latin to begin graduate-level coursework (normally two years each of college-level Greek and Latin with average grades of at least "A-");
5. Well-developed writing abilities.

Master of Arts (MA) Degree Requirements

The department offers a variety of programs leading to the MA degree. Each program is designed to prepare students for doctoral-level work in classical studies. Students are encouraged to study the particulars of each program with care and to consult with the director of graduate studies when making decisions about which program to enter. Students in some programs may also prepare themselves for a career teaching Latin or as a professional contract archaeologist.

General Requirements of all MA programs

Students should review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*. All graduate students are required, during their first fall semester in residence, to take CLA 5936, Proseminar in Classical Studies. All students must demonstrate competence in a modern foreign language (French, German, or Italian). This is accomplished by completing twelve semester hours of college level modern foreign language work with a grade point average of 3.0 or above; earning a 480 or above on the appropriate examination in the Graduate School Foreign Language Tests administered by ETS; or passing the Reading Knowledge Examination (FRE 5069, GER 5069, or ITA 5069).

Graduate students are required to maintain a 3.0 grade point average in all graduate work, and no course in classics for which a student receives a grade of "C" or below may count toward any graduate degree in the department.

All students pursuing the thesis option for a degree are expected, before arranging their comprehensive or translation exams or commencing work on a thesis, to select a major professor. The major professor will help the student to select his or her MA committee, will direct the student's thesis or paper and will work with the director of graduate studies in order to be certain that the student has met every requirement for the MA degree. Students are expected to familiarize themselves with University regulations concerning required forms and deadlines, as well as with the Classics Graduate Student Handbook available on the Department of Classics Web site (<http://classics.fsu.edu/>).

Master of Arts (MA) with a Major in Classical Archaeology

The program in classical archaeology allows a student to focus his or her coursework on archaeology and art history. It is recommended for students who intend to pursue further graduate work in classical archaeology.

All students must achieve at least a 3000 level proficiency in either Greek or Latin and the equivalent of one year's study of the other of the two classical languages. These requirements should be viewed as the minimum of language preparation. Students in archaeology are strongly encouraged to achieve graduate level proficiency in at least one ancient language.

Requirements (Thirty-two semester hours total)

Students are required to write master's paper (a substantial research paper that is usually an expanded version of a seminar paper) during the semester in which they are registered for CLA 5919.

Required Courses	Required Hours
CLA 5936 Proseminar	1
CLA 5789r Fieldwork	3
Seminars (usually CLA 5799)	6
Archaeology courses	9
Electives in classics	10
CLA 8961r Comprehensive examination	0
CLA 5919 MA paper	3

There are various means of meeting the fieldwork requirement. Students should consult with the archaeology committee in order to determine the most appropriate means of fulfilling this requirement.

Comprehensive Examinations for Classical Archaeology

The comprehensive exam in classical archaeology is divided into two parts:

1. One hour of identifications:
 - a. twenty-five slides each viewed for two minutes. Students are asked to identify and to explain the significance of major monuments of the type typically found in introductory textbooks on Greek and Italian archaeology.

2. Two hours of essays:
 - a. Select one essay from either the Bronze Age or Hellenic period;
 - b. Select one essay from either the Etruscan or Roman period.

The comprehensive exams are given each year in late September. For the purposes of the comprehensive examinations, the archaeology committee is the examination committee.

Master of Arts (MA) with a Major in Classics (Greek and Latin)

The program in classics (Greek and Latin) enables a student to concentrate his or her coursework on both languages. The program will prepare students for further graduate work in classical studies or for a career in teaching.

Requirements (Thirty-three semester hours total)

Students are required to write a master's paper (substantial research paper that is usually an expanded version of a seminar paper) during the semester in which they are registered for CLA 5919.

Required Courses	Required Hours
CLA 5936 Proseminar	1
Six courses at the 5000 (or 6000) level in Greek or in Latin (at least two courses must be taken in each ancient language)	18
One history course	3
One archaeology course	3
Electives in classics	5
LNW/GRW 8966r Translation examination	0
CLA 5919 MA paper	3

See below for a description of the translation examinations.

Master of Arts (MA) in Latin

The program in Latin enables the student to concentrate his or her coursework on that language. This program will prepare students for further graduate work and for teaching. Students hoping to proceed to doctoral-level work should also have some coursework in Greek.

Requirements (Thirty-three semester hours total)

Students are required to write a master's paper (a substantial research paper that is usually an expanded version of a seminar paper) during the semester in which they are registered for CLA 5919.

Required Courses	Required Hours
CLA 5936 Proseminar	1
Six courses at the 5000 (or 6000) level in Latin	18
One history course	3
One archaeology course	3
Electives in classics	5
LNW 8966r Translation examination	0
CLA 5919 MA paper	3

See below for a description of the translation examinations.

Master of Arts (MA) in Greek

The program in Greek enables the student to concentrate his or her coursework on that language. Students hoping to proceed to doctoral-level work should also have some coursework in Latin.

Requirements (Thirty-three semester hours total)

Students are required to write a master's paper (a substantial research paper that is usually an expanded version of a seminar paper) during the semester in which they are registered for CLA 5919.

Required Courses	Required Hours
CLA 5936 Proseminar	1
Five courses at the 5000 (or 6000) level in Greek	15
One history course	3
One archaeology course	3
Electives in classics	8
GRW 8966r Translation examination	0
CLA 5919 MA paper	3

See below for a description of translation examinations.

Master of Arts (MA) with a Major in Classical Civilizations

The program in classical civilization offers the student the most flexibility of any program in the department. A student may proceed to doctoral-level work through this program but must take care to have raised his or her languages to a suitable level of competency. If the student hopes to be involved in advanced work in archaeology, he or she must take care to acquire a background in archaeology sufficient to meet the requirements of doctoral programs in classical archaeology. Students in this program can easily combine language study with courses in archaeology and history. Graduates of this program have gone on to teach in schools, however, that opportunity requires that the student acquire sufficient skill in Latin. It is also possible to pursue this degree in order to prepare for further work in fields other than classics (such as comparative literature or humanities). Students will be required to pass *either* one of the Master's Comprehensive Exams in Greek or Latin (GRW 8966 or LNW 8966) *or* the Master's Comprehensive Exam in Classics (CLA 8961).

Requirements (Thirty-three semester hours total)

Students are required to write master's paper (a substantial research paper that is usually an expanded version of a seminar paper) during the semester in which they are registered for CLA 5919.

Required Courses	Required Hours
CLA 5936 Proseminar	1
Two courses in 1) Greek or Latin or 2) two courses in literature-in translation (or a combination thereof)	6
Two history courses (may be substituted for by taking courses in archaeology, Latin or Greek (at the 5000 level))	6
One archaeology course	3
Electives in classics	14
CLA 5919 MA paper	3
CLA 8961 or GRW 8966 or LNW 8966 Comprehensive Examination	0

Translation Examinations for Classics, Latin, or Greek

Students seeking an MA in Classics, Latin, or Greek will sit a translation examination. Passages will be drawn from the MA reading list in the Classics Graduate Student Handbook. All passages will be of medium difficulty. The level of competence required to pass the exam is that which might reasonably be expected of a student who has completed two years of graduate study. The exams are offered each year in late Fall and Spring.

Classics: from a selection, a student will translate four passages: one in Greek prose, one in Greek poetry, one in Latin prose, and one in Latin poetry.

Greek or Latin: from a selection (in the relevant language), a student will translate two passages: one in prose and one in poetry.

Master of Arts (MA) with a Major in Ancient History

The major in Ancient History offers students an opportunity to focus on historical authors in the original languages, achieve in-depth historical training, and write an MA paper or thesis on an historical topic.

Requirements (Thirty-three semester hours total)

Students are required to write a master's paper (a substantial research paper that is usually an expanded version of a seminar paper) during the semester in which they are registered for CLA 5919.

Required Courses	Required Hours
Proseminar (CLA 5936)	1
Four courses at the 5000- or 6000-level in Greek or Roman History (at least one course must be a 6000-level seminar)	12
Two courses at the 5000- or 6000-level in Greek or Latin (at least one course must be a 6000-level seminar, one course must be on a historical author)	6
One Archaeology course	3
Three additional courses (5000- or 6000-level) which may be based in related departments (students are encouraged to use at least one elective for further advanced language study of a historical author)	8
Translation Exams in Greek or Latin	0
Comprehensive Exam in Ancient History	0
MA paper (CLA 5919)	3

Comprehensive Examinations for Ancient History

All students must pass a translation exam in Greek or Latin, which will normally follow the same format as the departmental Comprehensive Exam but be based upon the Ancient History Reading Lists. All students must also pass a Comprehensive Exam in ancient history.

PhD with Majors in Classics or Classical Archaeology

The department offers the PhD in classics (ancient history, philology, literary criticism) and in classical archaeology. Students holding the BA with sufficient training in classics and who wish to pursue doctoral-level work in the department may apply directly to the PhD program. Students holding the BA, but without sufficient training in classics, should first apply to the MA program. Students entering the MA program may, upon recommendation and review by the faculty, be admitted to the PhD program before completion of the MA.

The PhD requires thirty semester hours of coursework beyond the MA, at least twelve semester hours of which must be at the 6000 level. Students should consult the Classics Graduate Student Handbook, available on the Department of Classics Web site (<http://classics.fsu.edu/>) for details of requirements, annual evaluations, and examinations. Each program requires a series of comprehensive examinations.

The program in classics requires: reading list examinations in Greek and Latin; demonstration of proficiency, by exam or through coursework, in Greek and Roman history; detailed examinations in Greek and Latin literature; a special author examination; a special field or topic examination; an examination in an interdisciplinary topic.

The program in classical archaeology requires: a reading list examination in either Greek or Latin; demonstration of proficiency, by exam or through coursework, in Greek and Roman history; examination on a topic in Bronze Age or Greek archaeology; examination on a topic in Etruscan or Roman archaeology; a special field or topic examination; an examination in an interdisciplinary topic.

Doctoral students must complete and successfully defend a dissertation that makes an original contribution to scholarship.

Definition of Prefixes

ARH—Art History

CLA—Classical and Ancient Studies

CLT—Classical Culture in Translation or Translation Skills

EUH—European History

FLE—Foreign Language Education

GRE—Classical Greek (Language Study)

GRW—Classical Greek Literature (Writings)

LAT—Latin (Language Study)

LNW—Latin Literature (Writings)

Graduate Courses

ARH 5111. Art and Archaeology of the Bronze Age in the Aegean (3). This course is a detailed study of the major archaeological evidence related to the Bronze Age in Crete and Greece; the major sites, monuments, and artistic works are studied and analyzed.

ARH 5119. Archaeology of Ancient Egypt (3). This course is a survey of the archaeology and art of Ancient Egypt from the Pre-dynastic to the Ptolemaic and Roman periods. Emphasis on the art, architecture, and culture of the Old and New Kingdoms.

ARH 5125. Etruscan Art and Archaeology (3). This course is a critical study and appraisal of Etruscan monuments and artistic works; major archaeological evidence for Etruscan culture.

ARH 5140. Greek Art and Archaeology of the Fifth and Fourth Centuries BC (3). This course is an analysis of classical Greek architecture, painting, sculpture, and other arts, and of the archaeological evidence for the chronology and cultural history of the classical period.

ARH 5160. Art and Archaeology of the Early Roman Empire (3). This course is an analysis of Roman architecture, painting, sculpture, and other arts from Augustus through the Antonines, and of the archaeological evidence for the chronology and cultural history of the early Imperial period.

ARH 5161. Archaeology of the Late Roman Empire (3). This course comprises a study of Roman art and archaeology from the second to the sixth century CE with emphasis on important sites and monuments.

ARH 5174r. Studies in Classical Art and Archaeology (3). This course focuses on studies in specific aspects of Greek and Roman art and archaeology. May be repeated to a maximum of six semester hours.

ARH 5934r. Tutorial in Classical Archaeology (1–3). Prerequisite: Instructor permission. This course uses intensive readings and discussion within a small group centered upon a specific topic or research problem in classical archaeology. May be repeated when topics vary to a maximum of nine semester hours.

ARH 6937r. Doctoral Seminar in Classical Archaeology (3). Prerequisite: CLA 5936. This course is a doctoral-level seminar devoted to a specific issue in classical archaeology. May be repeated when topics vary to a maximum of twenty-four semester hours.

CLA 5155. Pompeii (3). This course provides a study of the archaeology of Pompeii and neighboring towns from the seventh century BCE to the first century CE.

CLA 5438r. Studies in Greek History (3). This course is a study of selected topics in Greek history in the Archaic, Classical, or Hellenistic periods. May be repeated to a maximum of six semester hours.

CLA 5448r. Studies in Roman History (3). This course is a critical study of topics related to the Roman Republic or Empire. May be repeated to a maximum of six semester hours.

CLA 5789r. Classical Archaeology: Fieldwork (1–6). (S/U grade only). This fieldwork affords students the experience of excavation through an approved archaeological field school or project. May be repeated to a maximum of twelve semester hours.

CLA 5799r. Seminar in Classical Archaeology (3). This course is a seminar on special topics in classical archaeology with emphasis on understanding the workings of the discipline. May be repeated to a maximum of six semester hours.

CLA 5905r. Directed Individual Study (1–4). May be repeated to a maximum of nine semester hours.

CLA 5910r. Supervised Research (1–3). (S/U grade only). May be repeated to a maximum of three semester hours.

CLA 5919. Master of Arts Paper (3). (S/U grade only). This course offers students a capstone, independent-research experience on an advanced topic to be chosen by the student in conjunction with the major professor.

CLA 5920r. Classics Colloquium (1–3). (S/U grade only). This course is a series of lectures and seminars given by FSU faculty and visiting scholars on current research topics in Classics. May be repeated to a maximum of eighteen semester hours.

CLA 5931r. Special Topics in Classics (3–9). This course examines specific aspects of Greco-Roman literature and culture. May be repeated when topics vary to a maximum of nine semester hours.

CLA 5936. Proseminar in Classical Studies (1). (S/U grade only). This course is an introduction to research in classical studies.

CLA 5940r. Supervised Teaching (0–3). (S/U grade only). May be repeated to a maximum of three semester hours.

CLA 5942r. Internship in Museum Studies (3–6). This course is an internship in a museum or similar institution. May be repeated to a maximum of six semester hours.

CLA 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

CLA 6906r. Readings for Exams (1–12). (S/U grade only). This course is designed for graduate students who have completed required coursework and are preparing for comprehensive exams. May be repeated to a maximum of twenty-four semester hours.

CLA 6932r. Seminar in Classics (3–12). This seminar focuses on research topics dealing with specific aspects of Greco-Roman literature and culture. May be repeated when topics vary to a maximum of twelve semester hours.

CLA 6980r. Dissertation (1–12). (S/U grade only). Prerequisite: Admission to doctoral candidacy.

CLA 8961r. Master's Comprehensive Examination (0). (P/F grade only.)

CLA 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

CLA 8976r. Master's Thesis Defense (0). (P/F grade only.)

CLA 8985r. Dissertation Defense (0). (P/F grade only.) Prerequisites: CLA 6980r and CLA 8964r.

CLT 5295. Studies in Greek Tragedy: Aeschylus, Sophocles, and Euripides (3). This course examines readings and criticism of selected plays from the Greek tragedians in English translation.

CLT 5345. Studies in Greek and Roman Epic (3). This course is an analysis of the principal pieces of epic literature from the classical world read in English translation.

CLT 5379r. Seminar in Ancient Mythology (3). This course is a special study in seminar format of topics in ancient myth and its interpretation. May be repeated to a maximum of six semester hours.

EUH 5407. Hellenistic Greece (3). This course studies the Greek world from the death of Socrates (399 B.C.) to the Roman conquest (146 B.C., the sack of Corinth by Mummius).

EUH 5417. The Roman Republic (3). This course studies the history of Rome from its foundation (traditionally 753 B.C.) to the fall of the Roman Republic (31 B.C., the Battle of Actium).

EUH 5418. The Roman Empire (3). This course examines the Roman Empire from Augustus to Constantine. Emphasis on the evolution from the duarchy of the early empire to the monarchy of the late empire.

FLE 5810. Teaching Classics (3). This course prepares graduate students in classics for their role as teachers of undergraduates in lower-level courses in etymology, classical civilization, myth and Latin.

GRE 5305. Greek Syntax and Stylistics (3). Prerequisite: GRE 2220. This course is directed towards newly entering graduate students who need to improve their knowledge of the forms, vocabulary, and syntax of classical Attic Greek as well as develop their training in how to read, understand, and analyze Greek prose.

GRW 5215r. Studies in the Greek Prose Writers (3). This course focuses on the translation, commentary, and interpretation of readings from Greek prose writers. May be repeated to a maximum of six semester hours.

GRW 5305r. Studies in Greek Drama (3). This course is a detailed study through readings in the original texts of selected Greek plays. May be repeated to a maximum of six semester hours.

GRW 5345r. Greek Poetry (3). This course is a detailed study through readings in the original texts of selected Greek poets. May be repeated to a maximum of six semester hours.

GRW 5505r. Greek Philosophical Writings (3). This course is a detailed study through readings in the original texts of selected philosophical works. May be repeated to a maximum of six semester hours.

GRW 5908r. Directed Individual Study (1–4). (S/U grade only). May be repeated to a maximum of nine semester hours.

GRW 5909r. Tutorial in Greek (1–3). Prerequisite: Instructor permission. This tutorial consists of intensive work by a small number of postgraduates devoted to a specific topic or research problem in Greek studies. May be repeated when topics vary to a maximum of nine semester hours.

GRW 5971r. Thesis (3–6). (S/U grade only). A minimum of six semester hours is required.

GRW 6106. Survey of Greek Literature (3). Prerequisite: One 5000-level course in Greek or instructor permission. This course assists the student in working through the PhD/MA reading lists, outlines the basic genres of Greek literature in chronological order, and explores the style of its most renowned practitioners. Class sessions are normally divided between lectures on Greek literary history and authorial style and the translation of select passages from the assignment. A minimum of two years of college Greek is required, but students who have only had two years should consult with the instructor before registering for the course, as it is reading intensive.

GRW 6930r. Seminar in Greek (3). Prerequisite: CLA 5934. This doctoral-level seminar is devoted to a specific text or issue in Greek studies. May be repeated when topics vary to a maximum of twenty-four semester hours.

GRW 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

GRW 8976r. Master's Thesis Defense (0). (P/F grade only.)

LAT 5069r. Graduate Reading Knowledge Examination (0). (S/U grade only.)

LAT 5305. Intensive Latin Review (3). This course assists new graduate students to improve their knowledge of the forms, vocabulary, and syntax of classical Latin as well as their training in how to read, understand, and analyze Greek prose.

LNW 5316r. Studies in Roman Drama (3). This course covers translation, commentary, and interpretation of selected plays from Plautus, Terence, or Seneca. May be repeated to a maximum of six semester hours.

LNW 5325r. Roman Lyric, Elegiac, and Pastoral Poetry (3). This course covers translation, commentary, and interpretation of selected works from the Roman lyric, elegiac, and pastoral poets. May be repeated to a maximum of six semester hours.

LNW 5345r. Studies in Roman Epic (3). This course covers translation, commentary, and interpretation of selected works from Vergil or the other Roman hexameter poets. May be repeated to a maximum of six semester hours.

LNW 5365r. Studies in Roman Satire (3). This course covers translation, commentary, and interpretation of selected works from the Roman poetic satirists and satirical prose authors. May be repeated to a maximum of six semester hours.

LNW 5385r. The Roman Historians and Cicero (3). This course is a careful study of historical texts in Latin from the historians or Cicero. May be repeated to a maximum of six semester hours.

LNW 5908r. Directed Individual Study (1–4). (S/U grade only). May be repeated to a maximum of nine semester hours.

LNW 5932r. Tutorial in Latin (1–3). Prerequisite: Instructor permission. This course is an intensive study by a small number of postgraduates centering upon a specific topic or research problem in Latin studies. May be repeated when topics vary to a maximum of nine semester hours.

LNW 5971r. Thesis (3–6). (S/U grade only). A minimum of six semester hours of credit is required.

LNW 6106. Survey of Latin Literature (3). Prerequisite: One 5000-level course in Latin or instructor permission. This course assists the student in working through the PhD/MA reading lists, outlines the basic genres of Latin poetry in chronological order, and explores the style of its most renowned practitioners. Class sessions are normally divided between lectures on Latin literary history and authorial style and the translation of select passages from the assignment. A minimum of two years of college Latin is required, but students who have only had two years should consult with the instructor before registering for the course, as it is reading intensive.

LNW 6930r. Seminar in Latin (3). Prerequisite: CLA 5936. This doctoral-level seminar is devoted to a specific text or issue in Latin studies. May be repeated when topics vary to a maximum of twenty-four semester hours.

LNW 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

LNW 8976r. Master's Thesis Defense (0). (P/F grade only.)

CLASSICAL LITERATURE IN TRANSLATION: see Classics

CLINICAL PSYCHOLOGY: see Psychology

Graduate Specialized Studies Program in the Institute for COGNITIVE SCIENCES

COLLEGE OF ARTS AND SCIENCES

Director: Michael Kaschak, Department of Psychology

Specialized Studies in Cognitive Science

This specialized studies curriculum recognizes interdisciplinary study encompassing linguistics, computer science, philosophy, and psychology. Cognitive science explores human cognitive processes, such as knowledge representation, inference generation, memory, planning, problem solving, language, vision, and the modeling of these processes on computers. In pursuing specialized studies in this area, students will learn that a comparison of machine models and analogues of cognitive processes with human and animal behavior, together with a study of the philosophical implications of these comparisons, will lead to deeper understanding of cognition and a more useful application of cognitive theory in the component fields.

The program is open to students admitted to any graduate program at Florida State University. The specialized studies program itself is not a degree and is not a requirement in any degree program.

A student wishing to pursue the specialized studies program should select appropriate courses from those listed below, with the advice and consent of the student's major professor or degree advisor.

One course should be taken from each of the five areas below. For courses marked with an asterisk (*), consent of the instructor may substitute for stated prerequisites.

It should be noted that the specialized studies coursework may vary from eleven to more than seventeen semester hours outside of the student's degree program, depending on the specific courses chosen and on overlaps in requirements. Descriptions of the courses listed below can be found in the departmental listings.

For more information contact the Institute for Cognitive Sciences at (850) 644-9363, or at *Department of Psychology, 1107 W. Call St. Florida State University, Tallahassee, FL 32306-4301*; e-mail: kaschak@psy.fsu.edu.

Area I: Formal Techniques

- PHI 4134 Modern Logic I (3)
- PHI 5135 Modern Logic I (3)
- COT 5540 Logic for Computer Science (3)
- PHI 5934r Topics in Philosophy (3) [when approved]
- PHI 6935r Seminar in Philosophical Topics (3) [when approved]
- CIS 5930r Selected Topics in Computer Science (1-3) [when approved]
- *COT 4420 Theory of Computation (3)
- *COT 5310 Theory of Automata and Formal Languages (3)

Area II: Cognitive Psychology

- *DEP 5165 Developmental Psychology (3)
- *EXP 5508 Cognition and Perception (3)

Area III: Linguistics (Descriptive)

- LIN 4040 Introduction to Descriptive Linguistics (3)
- LIN 4512 Introduction to Transformational Grammar (3)
- LIN 5045 Descriptive Linguistics (3)
- LIN 5510 Transformational Grammar (3)

Area IV: Systems Theory

- *COT 4420 Theory of Computation (3)
- CAP 5605 Artificial Intelligence (3)
- CIS 5930r Selected Topics in Computer Science (1-3) [when approved]

Area V: Philosophical Foundations

- PHI 6225r Philosophy of Language (3)
- PHI 6306r Epistemology (3)
- PHI 6325r Philosophy of Mind (3)
- PHI 6935r Seminar in Philosophical Topics (3) [when approved]

School of COMMUNICATION Graduate Programs

COLLEGE OF COMMUNICATION AND INFORMATION

Website: <http://comm.cci.fsu.edu/>

Director: Jennifer Proffitt; **Professors:** Adams, Arpan, Houck, McDowell, Nudd, Opel, Proffitt, Raney; **Associate Professors:** Bruker, Chapa, Clayton, Cortese, Graves, Jordan, Lee, MacNamara, Merle, Rayburn, Sypher; **Assistant Professors:** Bailey, Dale, Ferchaud, Wendorf Muhamad; **Specialized Teaching Faculty:** DuBard, Haywood, Henry, Laurents, Zeigler; **Professors Emeriti:** Heald, Korzeny, Mayo, Wotring, Young

The School of Communication offers graduate programs of study leading to the Master of Arts (MA), Master of Science (MS), and Doctor of Philosophy (PhD) degrees. The student can select from several distinct major areas of emphasis which reflect specialized programs of study pertaining to either professional or academic careers in the communication field. Whether the student is interested in the traditional fields of human and speech communication, in the established discipline of media studies, or in the emerging areas of digital technologies, there are a variety of courses and course sequences available. The School also offers graduate-level certificates in the areas of Multicultural Marketing Communication, Digital Video Production, and Project Management.

Specifically, at the master's level, programs of study are offered in communication with an emphasis in integrated marketing communication, media and communication studies, and public interest media and communication. At the doctoral level, a program of study is available in communication theory.

Both thesis and non-thesis master's options are available. Some non-thesis master's programs are professionally oriented and assume the student will not pursue the doctoral degree in communication. Thesis master's programs are often theoretically oriented and prepare the student for doctoral work. Each major specifies entry requirements and degree requirements to meet predetermined educational and professional goals. While each major has its own set and sequence of required courses, every program of study is planned individually with each student so as to ensure flexibility to meet individual student needs. Acceptance into each major is highly competitive and is based on student qualifications.

Faculty Distinctions

The graduate program in communication reflects the varied teaching and research interests of the faculty. Beyond their range of expertise in communication theory and research, faculty members remain united in their dedication to teaching excellence, as demonstrated by the regularity with which they receive teaching commendations and awards. Faculty members from the School of Communication have been elected and continue to serve as officers in major academic societies and professional associations. Faculty members have been and remain prominent in scholarly journals, serving as editors, associate editors, and, most importantly, authors. A series of journal publications, as well as books, convention papers, and monographs, have established a number of faculty members as nationally as well as internationally recognized leaders in their respective fields.

Assistantships/Scholarships

The School of Communication offers teaching and research assistantships to doctoral students and to master's students (as funding is available). The number and amount of assistantships vary and are competitive. Assistantships also provide assistance with course tuition. Competitive scholarships are also offered each year.

Applications and Admissions

1. The candidate should apply online to the University Graduate Admissions Office website at <http://admissions.fsu.edu>. The School application instructions are also available online at <http://comm.cci.fsu.edu>. Applicants should upload their completed forms with supporting documents to the online university application. The School will accept new graduate applicants each semester.
2. **Minimum** criteria to be considered for admission to the master's program include a GPA of 3.0 (on a 4.0 scale) for the last two years of undergraduate work and completion of the verbal, quantitative, and writing sections of the Graduate Record Examination (GRE). The GRE requirement will be waived for outstanding Master's applicants who meet minimum criteria and who apply for the requirement to be waived; further details are found on the School of Communication

website. Minimum criteria to be considered for admission to the doctoral program include a master's GPA of 3.3, an undergraduate GPA of 3.0 for the last two years of undergraduate work, and completion of the verbal, quantitative, and writing sections of the Graduate Record Examination (GRE).

3. All applicants must submit three letters of recommendation and completed University and School application forms.
4. Applicants for the doctoral program may be asked to complete an interview with the doctoral program committee, preferably in person although telephone or digital video conferencing is acceptable. Under certain conditions a videotaped statement in response to a set of questions provided by the committee could be substituted for the interview.

International students are required to submit GRE scores and a Test of English as a Foreign Language (TOEFL) score of 600 or above or an Internet-based TOEFL score of 100 or above. Regardless of TOEFL scores, some international students may be required by the International Admissions Office, the graduate admissions committee, or their advisory committee to enroll in the Center for Intensive English Studies program in order to begin in the program, regardless of the degrees that have been earned in their home countries. If an international student has demonstrated English competency, some of these requirements may be waived.

Master of Arts (MA) and Master of Science (MS) Degree

Supervisory Committee and Program of Study

1. Prior to or during registration for the first semester, students should meet with the coordinator for their emphasis area. The coordinator will help the student plan coursework for the first semester.
2. For non-thesis students, the area coordinator will serve as chair of the student's standing supervisory committee. Students pursuing a thesis must select a major professor or committee chair. This person is usually a specialist in the student's major area. It is the student's responsibility, after consultation with the area coordinator, to secure consent of an eligible faculty member to serve as the major professor and to work with the major professor to form a committee. Master's thesis supervisory committees and Master's creative project supervisory committees have a minimum of three members, of which two must be (all three may be) from within the School of Communication. All members on master's supervisory committees must hold Graduate Faculty Status (GFS).
3. No later than the end of the first semester, the student must submit a program of study to the committee for approval. The program must closely follow the guidelines of the selected major and must meet School and University requirements. The proposed program of study should be developed with the help and advice of the major professor. If a committee meeting is required, the program of study should be submitted to all committee members at least five days before the committee meets. At the meeting, the committee will discuss and modify the program of study as necessary.
4. If the student's undergraduate preparation is weak, out of field, or insufficient for work in the area chosen, the admissions committee or supervisory committee may require that the student complete specified undergraduate courses in areas of deficiency. These make-up courses will not normally be credited toward master's requirements.
5. Not more than six semester hours may be transferred from another graduate institution and then only with the approval of the supervisory committee. Not more than six semester hours of directed individual study (COM 5906) may be applied toward the master's degree.
6. All courses must be 5000-level or higher to count toward the master's degree.
7. The program of study must be approved by all committee members, the area coordinator, and the School director. The student should provide signed copies to all signatories, with the director's copy filed in the student's folder. Changes in the program of study or in the composition of the supervisory committee are accomplished with special forms obtained from the School. The forms are signed by all committee members, the area coordinator, and the School director and are attached to the student's original program of study.
8. A master's program normally requires the equivalent of one and one-half calendar years of full-time coursework. Students with less

background in their chosen area of specialization, or with degrees outside of communication, or who are completing a thesis should expect to spend longer to complete a master's program.

9. Graduate students are required to earn grades of "B-" or better in all courses in order for the courses to be counted toward the degree. A GPA of at least 3.0 must be maintained for all master's work.
10. There is no University-wide residency requirement.
11. Each master's candidate must demonstrate, by term papers or thesis, writing skills that are acceptable to the student's committee.
12. The English proficiency of domestic and international students will be evaluated by the student's supervisory committee at least by the end of the student's second semester of residency. If the committee decides that the student's English usage is deficient, the committee will recommend remedial action. If after remedial action the student's English proficiency is still considered to be below an acceptable level, the student may be dismissed.
13. There is no School-wide foreign-language requirement. If the student wishes to receive the Master of Arts degree, the University requires: a) proficiency in a foreign language demonstrated by certification by the appropriate language department, or completion of twelve semester hours in a foreign language with an average grade of at least 3.0 ("B"), or four years of a single language in high school; b) six or more semester hours of graduate credit in one or more of the following fields: art; classical language, literature, and civilization; communication (not to include speech correction); English; history; humanities; modern languages and linguistics; music; philosophy; religion; and theatre.
14. Depending on the major area in which the student is enrolled, the student may elect a thesis or non-thesis program. To qualify for the master's degree under the thesis program, the student must complete a minimum of thirty-three semester hours including six hours of thesis credit. At least twenty-four of those hours must be taken on a letter-grade basis.
15. To qualify for the master's degree under the non-thesis capstone program options, the student must complete a minimum of thirty-three semester hours, twenty-seven of which must be on a letter-grade basis, and either complete a thesis, a creative project, or a residency (**Note:** The residency option is limited to the IMC master's program). Students may also qualify for the master's degree under the coursework-only option for which they must complete a minimum of thirty-six semester hours. The non-thesis program is considered a terminal degree (i.e., the student is normally not expected to continue for the doctorate). The supervisory committee may require an oral examination of the creative project or capstone residency report. Copies of clearance forms are signed and placed in the student's file.
16. Students must complete requirements for the master's degree within forty-three semester hours maximum including thesis. Any hours taken beyond forty-three will not be credited toward the master's degree nor can they be counted in a PhD program. The student must complete the master's degree before beginning doctoral coursework.
17. A prospectus must be approved by all committee members prior to research or data collection for a thesis. Signed copies are to be filed in the student's School folder.
18. At the same time, the student should make application for graduation and the diploma.
19. The manuscript and final clearance advisor in the Graduate School must approve the form of the thesis before final preparation. It is recommended that students consult with this advisor early in the preparation stage and download a copy of *Guidelines and Requirements for Electronic Theses, Treatises, and Dissertations* from the Graduate School.
20. Prior to the oral defense of the thesis, an announcement must be sent to the Graduate School via the Manuscript Clearance Portal. This announcement must be published at least two weeks prior to the defense. At least one week prior to the oral defense of a thesis, capstone residency, or creative project, the candidate is responsible for notifying all School faculty of the time and place of the defense. Graduate students may also attend the defense. The candidate is responsible for scheduling the oral defense at a time convenient for all the committee members.
21. The defense should be scheduled at least two weeks after copies of the thesis, reports, or examinations have been distributed to committee members. These must be seen by the candidate and the major professor as final copies. The academic calendar in the *Registration Guide* specifies deadline dates.

22. The major professor will bring to the oral examination the School graduate exam clearance form which is to be signed by all committee members and by the School director.
23. All needed forms associated with the defense of the thesis and degree clearance are found in the Graduate School's Manuscript Clearance Portal, and students are responsible for following the procedures and adhering to the deadlines posted by the Graduate School each semester. Please note the submission deadlines published in the *Registration Guide*. It is courteous to give all members of the committee and the School copies of the thesis.

Master of Arts (MA) and Master of Science (MS) Degree Programs

Master's Degree in Professional Communication with an Emphasis in Integrated Marketing Communication

Career Goals. This program is designed for students interested in careers that merge advertising, public relations, cross-cultural marketing communication, new communication technologies, and applied research. It provides a foundation for students who wish to pursue professional careers in integrated marketing communication, digital marketing communication, and Hispanic marketing communication. The program can also lead to advanced graduate studies.

Educational Goals. The student will follow a course of studies providing: 1) basic knowledge of communication theories, with particular emphasis on those that apply to marketing communication, new communication technologies, and Hispanic marketing communication; 2) preparation for professional careers in digital media production using new technologies in marketing and/or management roles; 3) development of fundamental proficiencies in applied research; 4) skills in developing and organizing data/information systems, and facilitating data-based decisions; 5) insights into the coordination of promotional communication, cross-cultural communication initiatives, new technologies, and applied research strategies to facilitate organizational and promotional goals; and 6) experience in making formal marketing/management communication presentations.

Areas of Special Knowledge and Skills to be Developed. Depending on career path and specific course of study, the proportion of coursework within each of the following will vary: marketing communication techniques, including strategic and performance-based project management, account planning, desktop multimedia applications, and cross-cultural promotions; traditional and new media marketing communication strategies, including advertising and public relations research, marketing communication planning, design, implementation, and evaluation; application of research methods to marketing communication, including quasi-experimental and survey design, content analysis, focus groups, database research techniques, and data analysis; digital media applications and digital marketing communication; and computer-mediated communication research skills and tools.

Required Hours. A minimum of thirty-three semester hours is required; thirty-six semester hours are required with a coursework-only option. It is possible to complete the program in one academic year, though many students spread the degree requirements across four semesters. Students who have insufficient backgrounds in communication and related subjects at the undergraduate level may be required to take three to nine semester hours of letter-graded undergraduate coursework as determined by their supervisory committees. These additional hours will not count toward completion of master's degree requirements.

For specific course requirements, visit the School website at <http://comm.cci.fsu.edu> or contact the School.

Master's Degree in Communication and Digital Media with an Emphasis in Media and Communication Studies

Career Goals. This program is designed for graduate students interested in studying communication interactions in society. Studies may result in a terminal degree leading to a position in media, a communication-related agency, or other organizations involving political, social, and public sector settings. The program also may serve as preparation for doctoral work in communication, leading to a teaching or research position.

Educational Goals. In this master's program, students will be introduced to theory, research methods, historical background, and contemporary social issues pertaining to: 1) human communication, such as interpersonal communication, gender studies, and social interaction; 2) mass media criticism, policy, processes, and effects; and/or 3) political communication, rhetoric, and persuasion.

Areas of Special Knowledge and Skills to be Developed. By the conclusion of this master's program, students will have knowledge and experience in:

applying theory relative to communication studies, rhetoric, and mass communication; using various communication research methods; critically analyzing content and effects of traditional and new media; and identifying key issues in developing tools for analysis of political, public, and advocacy communication campaigns and strategies.

Required Hours. A minimum of thirty-three semester hours is required; thirty-six semester hours are required with a coursework-only option. Students who have completed insufficient coursework in communication at the undergraduate level (e.g., students who did not major in a communication-related area) may be required to take six to twelve semester hours of letter-graded, undergraduate coursework as determined by their supervisory committee. These additional hours will not count toward completion of the thirty-three semester hours.

For specific course requirements, visit the School website at <http://comm.cci.fsu.edu>, or contact the School.

Master's Degree in Communication and Digital Media with an Emphasis in Public Interest Media and Communication

Career Goals. This program is designed for graduate students interested in working in the communication areas of non-governmental organizations, political campaigns, government agencies, and social service groups. The program also may serve as preparation for doctoral work in communication, leading to a teaching or research position.

Educational Goals. In this master's program, students will be introduced to practical digital media production skills, as well as theory and research methods. The program prepares students to: 1) conceptualize, design, and produce effective digital media/video; 2) harness the power of social media distribution networks; 3) analyze data to determine how messages are being received and acted upon; and 4) use communication theory to guide media creation and evaluations.

Areas of Special Knowledge and Skills to be Developed. By the conclusion of this master's program, students will be able to: create digital video media content, evaluate audience reception of media campaigns, apply communication theory in the development of media campaigns, and tailor media messages to specific audiences and respond to audience feedback.

Required Hours. A minimum of thirty-six semester hours is required. Students who have completed insufficient coursework in communication at the undergraduate level (e.g., students who did not major in a communication-related area) may be required to take six to twelve semester hours of letter-graded, undergraduate coursework as determined by their supervisory committee. These additional hours will not count toward completion of the thirty-six semester hours.

For specific course requirements, visit the School website at <http://comm.cci.fsu.edu>, or contact the School.

Doctor in Philosophy (PhD) in Communication

PhD in Communication

The School of Communication offers a PhD program in communication research and theory.

Minimum Required Hours: Students are required to complete a minimum of forty-eight course credit hours beyond the master's degree, plus twenty-four hours of dissertation credits. Course credits will include three required foundation courses, as well as study in a primary and secondary area of emphasis and research methods and design. Specific course requirements are determined by the doctoral supervisory committee in accordance with School and University requirements.

Required Cognate: An outside cognate of twelve semester hours approved by the doctoral supervisory committee is required.

Special Note: All communication doctoral students must register for the required communication research colloquium (COM 5920) during every semester of full-time coursework.

For specific course requirements, visit the School website at <http://comm.cci.fsu.edu> or contact the School.

Program Overview

Beginning with a common set of foundational courses, students will encounter a range of philosophical, theoretical, and methodological approaches to communication scholarship. A major goal of the program is for students to gain knowledge of and an appreciation for the complexities and interdependencies within communication inquiry. To that end, students will gain a theoretical grounding in the broad communication discipline and then will pursue more advanced study through doctoral-level seminars, directed independent studies, and supervised research experiences. Students will be actively mentored to present the results of their work at regional and national conferences,

culminating in publication in refereed outlets. Additionally, most students will have the opportunity to develop teaching and classroom management skills through our funded assistantship program.

Program Objectives

This program is primarily designed for students who are interested in pursuing academic teaching and research careers within the communication discipline. However, some may choose to use the degree to launch a career in one of the various communication-related industries, research, consultancy, not-for-profit organizations, or governmental affairs. Regardless of the student's chosen career path, the primary objective for all will be to become an independent and original scholar.

The educational goals of the program are to provide students with advanced knowledge of or experience in: 1) communication theory and inquiry; 2) selected extant communication literatures; 3) research methods applicable in either theoretical or applied settings to the study of selected communication texts, processes, audiences, systems, industries, organizations, or effects; 4) research design and data/textual analysis; and 5) teaching undergraduate students at a state-supported university.

Communication Theory and Research

Career Goals: Conduct scholarly research and teach in a college or university; management position within a communication or research organization; consultant in media, research, or marketing in for-profit, not-for-profit, and governmental settings.

Additional Educational Goals: Knowledge of communication theories and research; training in both quantitative and qualitative research design and analysis; experience with various methods for basic and applied communication research.

Skills to be Developed: Ability to conduct independent, scholarly research; ability to teach at university or college level; quantitative and qualitative research methods; effective written communication.

Supervisory Committee and Program of Study

1. A provisional advisor is assigned to the student at the time of acceptance into the program. During the student's first semester in the program, the provisional advisor will assist the student in registering for courses and may be a source of information for the student concerning choice of major professor, cognate area, program of studies, and registration for the second semester.
2. By the midpoint of the second semester, the student must designate a major professor who has consented to serve in that capacity. The major professor will take over the advising duties of the provisional advisor, will be the student's principal advisor in choosing members for the doctoral supervisory committee, and will assist the student in developing a preliminary program of study. Faculty members holding Graduate Faculty Status (GFS) with doctoral directing status are eligible to serve as major professors.
3. The doctoral supervisory committee approves the program of study, reviews and approves any proposed revisions to the program of study, and designs and evaluates the doctoral preliminary examination. Doctoral supervisory committees have a minimum of four members: three from within the School of Communication plus one outside member. All members must hold GFS. The outside member of the committee must be from a different department at FSU. This outside member serves as the University's representative-at-large who reports directly to the dean of the college and to the dean of the Graduate School; accordingly, the outside member must hold university graduate faculty status and must be tenured.
4. The first semester of the student's coursework, a proposed program of study is completed. The program of study is a document detailing the courses that a student plans to take in the doctoral program, as well as a timeline for completing those courses. Before the beginning of the third semester of enrollment, the student must submit for approval a program of study to the doctoral supervisory committee, the director of doctoral studies, and the School director. Additionally, the student must submit a statement of purpose, detailing the student's major areas of interests, degree completion schedule, and career goals.
5. At the end of a student's coursework but before preliminary exams are taken, the doctoral supervisory committee will meet with the student to complete a final review of the program of study and concept paper. All changes will be reviewed and a final, corrected version of the program of study is signed and sent to the director of doctoral studies for the additional signatures.

6. The doctoral program often requires six or seven semesters of full-time coursework (48 hours of coursework) beyond the master's degree and at least one year of dissertation work. Students with a master's degree from a discipline other than communication may spend more time completing the doctoral program. All courses must be 5000-level or higher to count toward the doctoral degree. Doctoral students must complete requirements for the PhD within 135 semester hours maximum, including dissertation.
7. According to University policy, all graduate students are required to earn grades of "B-" or better in all courses in order for the courses to be counted toward the degree. In addition, a grade point average of at least 3.4 (out of a possible 4.0) must be maintained for all PhD work.
8. All students must meet Florida State University's and the School's Scholarly Engagement Policy requirement to ensure that doctoral students are active participants in the scholarly community. To meet the Scholarly Engagement requirement, doctoral students should interact with faculty and peers in ways that may include enrolling in courses; attending seminars, symposia, and conferences; engaging in collaborative study and research beyond the university campus; and utilizing the library, laboratories, and other facilities provided by the university for the purpose of knowledge creation. Activities that contribute to scholarly engagement in the School are described in the Guide to Doctoral Studies.
9. Prior to the preliminary examinations, every doctoral student is required to submit and have accepted three original scholarly papers or works to an appropriate journal and/or a state, regional, or national convention or festival (all work must be peer reviewed).
10. The English proficiency of domestic and international students will be evaluated by the student's doctoral supervisory committee at least by the end of the student's second semester of residency. If the committee decides that the student's English usage is deficient, the committee will recommend remedial action. If, as a result of remedial action, the student's English proficiency is still considered to be below an acceptable level, the student may be dismissed.
11. There is no School-wide foreign language requirement.
12. The progress of all students in the PhD program is reviewed annually at the conclusion of the Spring semester by the student's major professor in consultation with the Director of Doctoral Studies.
13. At the end of coursework, students will enroll for and complete COM 8964, Doctoral Preliminary Examination (0). Details concerning the preliminary examination requirements can be found in the Guide to Doctoral Studies. The purpose of the preliminary examination is to determine if the student is sufficiently prepared to continue with the original, independent scholarly work required to complete a doctoral dissertation. The preliminary examination may not be taken if the student has one or more incomplete grades pending.
14. Supervisory committees in our School have been given great latitude in determining the nature and content of the preliminary exams. The content covered on the exam is determined by the full committee. Typically, the outside member of the committee provides questions covering the cognate area of study. The nature of the exam is likewise determined by the supervisory committee. The committee is given an opportunity to further examine the student's performance through the oral portion of the doctoral preliminary examination. The oral portion of the exam must occur between seven and fourteen calendar days following submission of the written portion to all committee members.
15. Successful completion of the doctoral preliminary examination must occur at least six months prior to the degree being granted.
16. All work for the doctoral degree must be completed within five calendar years after the time the student passes the doctoral preliminary examination, or the student must pass a new preliminary examination.
17. Upon satisfactory completion of the preliminary examination the student is admitted to candidacy for the doctoral degree and is eligible to enroll for dissertation credits. Upon a student's admission to candidacy, the role of the doctoral supervising committee shifts to oversight of the student's dissertation process: proposal defense and approval, guidance during dissertation completion, and defense and approval of the dissertation. Given this shift in responsibilities, the student may seek to change the composition of the doctoral supervising committee. All requirements for the committee's makeup noted above remain in effect.
18. Upon admission to candidacy, the student must register for dissertation credits (COM 6980r) each term in which a substantial amount of work is being done on the dissertation. Students must register for a minimum

of twenty-four hours of dissertation credit in their program. The student must carry a minimum of two dissertation credits during every semester in which (s)he is using and requiring university facilities or requires faculty supervision. As noted above, enrollment in COM 6980r is not possible until a passing grade is recorded for COM 8964, Doctoral Preliminary Examination.

19. A dissertation prospectus must be approved by all committee members prior to research or data collection for a dissertation. The purpose of the dissertation prospectus is to provide the committee members with a description of the proposed dissertation study, so they can determine the soundness and feasibility of and the student's preparedness to accomplish the proposed project.
20. With the major professor's approval, the student must enroll in COM 8985, Dissertation Defense (0) for the semester in which the dissertation project will be completed and defended. The defense must be scheduled no later than one month prior to the final submission deadline published by the Graduate School.
21. The manuscript and final clearance advisor in the Graduate School must approve the formatting of the final dissertation. The student should consult with the clearance advisor early in the preparation stage and closely follow the formatting rules set out in the *Guidelines and Requirements for Electronic Theses, Treatises, and Dissertations* publication.
22. Prior to the oral defense of the dissertation, an announcement must be sent to the Graduate School via the Manuscript Clearance Portal. This announcement must be published at least two weeks prior to the defense. At least one week prior to the oral defense, the candidate is responsible for notifying all School faculty of the time and place of the defense. Graduate students may also attend the defense. The candidate is responsible for scheduling the oral defense at a time convenient for all committee members.
23. A draft of the dissertation must be sent to the outside committee member at least four weeks prior to the oral defense. The defense must be scheduled at least four weeks after final copies of the dissertation have been distributed to committee members. The major professor will bring to the oral examination the School graduate exam clearance form, which is to be signed by all committee members and by the School director.
24. All needed forms associated with the defense of the dissertation and degree clearance are found in the Graduate School's Manuscript Clearance Portal, and students are responsible for following the procedures and adhering to the deadlines posted by the Graduate School each semester. Additionally, as a courtesy, the student should give all members of the supervisory committee electronic copies of the dissertation.
25. All requirements and guidelines above are described in more detail in the Guide to Doctoral Studies, which all students receive upon entry into the program. The Guide should be consulted by students regularly.

Certificates

The School of Communication offers graduate level certificates in Digital Video Production, Multicultural Marketing Communication, and Project Management. Contact the School for more information.

Definition of Prefixes

ADV—Advertising

COM—Communication

MMC—Mass Media Communication

RTV—Radio: Television

SED—Speech Education

SPC—Speech Communication

VIC—Visual Communication

Graduate Courses

ADV 5007. Foundations of Integrated Marketing Communications (3). This course covers the development of Integrated Marketing Communication that has now become part of business models in many corporations and service organizations, as well as universities.

ADV 5415. Hispanic Marketing Communication (3). This course prepares professionals to field the increasing number of positions that require marketing expertise to serve the U.S. Hispanic market.

ADV 5416. Multicultural Marketing Communication (3). Recommended prerequisites: ADV 5415 and COM 5331. This course explores consumer behavior similarities and differences among Hispanic, Asian, African-American, and Non-Hispanic White cultural market segments in the United States. The course also provides opportunities for original research into issues of culture and marketing communication.

ADV 5503. Media Consumer Behavior (3). This course deals with the research and analysis of consumer behavior.

ADV 5605. Account Planning (3). This course prepares students to connect consumers with advertising and marketing in public relations and other communication fields.

ADV 5701. Communication Career Futures (3). (S/U grade only). Recommended prerequisite: At least one semester of the graduate program. This course is directed to Communication graduate students who intend to pursue applied, non-academic careers upon completion of their degree. The course assists students in setting up job-search strategies, preparing documentation for seeking employment, developing job-related oral communication field skills, and understanding career opportunities in the communication field.

COM 5126. Organizational Communication Theory and Practice (3). This course provides an overview of the major organizational communication theorists and shows students how they can be used to diagnose and solve communication and performance problems.

COM 5127. Assessing Organizational Communication (3). This course introduces students to the methods of assessing organizational communication including survey, feedback methodology, assessment, and related issues in applied research.

COM 5235. Crisis Communication (3). This course, a seminar centered on the theoretical frameworks used in crisis communication, focuses specifically on the analysis of research conducted for the main components of a crisis (messages, responses strategies, publics) during all phases of a crisis (pre, post, during).

COM 5312. Research Methods in Communication (3). This course is an introduction to quantitative and qualitative research methods.

COM 5314. Measurement of Listener-Viewer Attitude and Response (3). This course focuses on quantitative and qualitative research methods, with particular emphasis on surveys, for measuring mass audiences.

COM 5316. Statistical Methods in Communication Research (3). Recommended prerequisite: COM 5331. This course examines statistical methodologies for communication research.

COM 5317. Content Analysis in Communication Research (3). This course focuses on content analysis methodologies for communication research.

COM 5331. Data Analysis in Communication Science (3). This course explores the statistical analysis of communication science related data via current software tools.

COM 5338. Web Site Usability and Design (3). Prerequisite: COM 4470 or equivalent. This course covers human-computer interaction, design concepts, and usability research techniques. The course includes a series of papers and projects focusing on visual design, audience analysis, technology, and usability analysis in order to select displays, layout, typeface, color, and metaphor. The course helps students gain an understanding of how the above-mentioned techniques are used to help focus content and select the most appropriate interface for the needs of the target audience.

COM 5339. Interactive Programming and Design for the Web (3). Recommended prerequisite: COM 5338. This course, a continuation of COM 5338, focuses on the critical evaluation of existing Web sites based on information presented from readings and the analysis of the possibilities (and limitations) of Web-based communication. Through the study of tools and techniques commonly used to develop Web pages, animation and interactive modules, students complete a Web site as a deliverable.

COM 5340. Historical-Critical Methods of Research (3). This course is a review of historical methods, resources, and critical approaches in communication research.

COM 5348. Qualitative Methods in Communication Research (3). This course is a survey of contemporary qualitative methods for analyzing a range of media texts and speech.

COM 5364. Foundations of Digital Media (3). This course provides an introduction to the fundamentals of digital video production. Topics include concepts of videography, video editing, and soundtrack design.

COM 5365. Computer Graphics and Animation (3). This course provides an introduction to the construction of graphics and animation using digital software tools. There are three primary areas of focus: 1) the manipulation of still images; 2) the creation of moving images using digital software tools; and 3) the enhancement of digital video through special effects.

COM 5401. Analysis of Communication Theory (3). This course analyzes the field of communication through the study of key theories of human communication research.

COM 5426. Media, Culture and the Environment (3). This course examines the role of language and representation in our understanding of the natural world. The course also examines news media coverage of environmental issues, environmental images in popular culture, as well as the communication strategies of environmental organizations.

COM 5450. Introduction to Project Management (3). This course covers the processes, tools and techniques for managing projects of any size while preparing students to sit for the Project Management Professional (PMP) certification exam.

COM 5451. Advanced Topics in Project Management (3). This course covers the theories of several important project managers of the late 20th and early 21st centuries, including Edward Deming, Peter Drucker, Thomas Peters, Eli Goldratt, Philip Crosby and others.

COM 5452. Agile Project Management (3). Prerequisite: COM 5450. This course covers the key concepts and approaches of Agile Project Management and prepares students to sit for the PMI-ACP certification exam.

COM 5526. Marketing Communication Management (3). This course addresses the principles and procedures for communications planning for marketing and culminates in the development of an integrated marketing plan for e-business.

COM 5546. Political Communication (3). This course focuses on the relationships between politics in the U.S. and internationally and the media. Considering the interdisciplinary nature of political communication, a field at the intersection of sociology, psychology, rhetoric, political science, and media effects, the overarching methodological approach may encompass qualitative and/or quantitative emphases. The course both outlines the main theoretical frameworks used in the scholarship, as well as address methodological concerns and current topical issues.

COM 5565. Social Media Advocacy Campaigns (3). This course introduces students to theories and research related to the role of social media in social change. The course also prepares students to design and implement an advocacy social media campaign.

COM 5906r. Directed Individual Study (1–12). (S/U grade only). Prerequisite: School approval. In this course, students select a topic of interest to pursue under supervision of a faculty member that results in a final project, where the scope and type are defined by the student and faculty supervisor. This course may be repeated to a maximum of twelve semester hours. May be repeated within the same term.

COM 5911r. Supervised Research (1–5). (S/U grade only). Prerequisite: School approval. May be repeated to a maximum of five semester hours; duplicate registration allowed. A maximum of three hours may apply to the master's degree.

COM 5920r. Colloquium in Communication (0–1). (S/U grade only). This course is a series of lectures given by faculty, advanced graduate students, and visiting scholars. Required of all doctoral students. May be repeated to a maximum of six semester hours.

COM 5940r. Supervised Teaching (1–5). (S/U grade only). Prerequisite: School approval. May be repeated to a maximum of five semester hours; duplicate registration is not allowed. A maximum of three semester hours may apply to the master's degree.

COM 5946r. Communication Residency (1–6). (S/U grade only). This course provides work experience to apply and extend knowledge learned within the master's program.

COM 5955. Capstone Creative Project (1–6). (S/U grade only). This course is an applied or creative project (comparable in scope to a thesis) that serves to demonstrate the skills or knowledge that students have developed throughout their master's program resulting in a non-traditional deliverable (e.g., a performance, implementation of campaign, film/video, or other). Requires independent work reflecting analysis or interpretation, as well as application of skills or theoretical concepts to a new context. Must include a proposal and defense, as well as a final defense with a final deliverable. May be repeated to a maximum of six semester hours.

COM 5971r. Thesis (1–12). (S/U grade only). A minimum of six semester hours of credit is required.

COM 6015. Gender and Communication (3). This course explores contemporary perspectives on the relationship between gender and communication in three areas: (1) the nature of gender; (2) the construction of gender in the media; and (3) gendered communication within "queer" culture.

COM 6400r. Seminar in Communication Theory (3). This course is an analysis of existing theoretical perspectives and new developments in communication theory. May be repeated to a maximum of nine semester hours. Duplicate registration is allowed.

COM 6403r. Advanced Problems in Communication Theory and Research (2–8). May be repeated to a maximum of eight semester hours; duplicate registration allowed. School approval required.

COM 6900. Preparation for the Preliminary Examination (2–4). (S/U grade only). Prerequisite: School approval. Doctoral students only. To be taken in the semester preceding preliminary examination.

COM 6931r. Special Topics in Communication Research (3). This course includes survey, analysis, and practicum of research in specialized topics relating to the process and effects of communication in the aural, oral, or mass media mode. May be repeated to a maximum of nine semester hours. Duplicate registration is allowed.

COM 6980r. Dissertation (1–12). (S/U grade only.)

COM 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

COM 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

COM 8975. Capstone Creative Project Defense (0). (S/U grade only). This defense course accompanies an applied or creative project (comparable in scope to a thesis) that serves to demonstrate skills or knowledge students have developed throughout their master's program resulting in a non-traditional deliverable, e.g., a performance, implementation of campaign, film/video, or other.

COM 8976r. Master's Thesis Defense (0). (P/F grade only.)

COM 8985r. Dissertation Defense (0). (P/F grade only.)

MMC 5305. Comparative Systems of Mass Communication (3). This course is an examination of various international and national mass communication systems and the elements which determine the type of systems currently operating throughout the world.

MMC 5600. Mass Communication Theory and Effects (3). This course is an analysis of historical and current theories of mass communication with an emphasis on media effects.

MMC 5646. Political Economy of Media (3). This course covers the structure and functions of U.S. and other mass communication systems and their relationship to the political and economic systems.

MMC 6469. Diffusion of Innovations (3). This course is an examination of various theoretical and practical issues pertaining to communication's roles in the diffusion of innovations.

MMC 6920r. Colloquium in Mass Communication (3). This course is a survey of issues of immediate interest and consequence to the area of mass communication. May be repeated to a maximum of nine semester hours. Duplicate registration is allowed.

RTV 5333. Documentary Video Production (3). This course offers instruction in the theory and practice of production of non-fiction documentary video. Students produce a final video product and a research paper after studying the documentary tradition, theory and history.

RTV 5423. New Communication Technology (3). This course surveys key issues related to new communication technologies within a variety of communication contexts. Specific topics vary as new technologies emerge.

RTV 5575. Digital Post Production (3). This course will cover a broad range of post-production topics, including compression and codecs, video editing, basic motion graphics, color correction, audio editing, and exporting. This course will include instruction in industry-standard software, and will also be balanced with exploration of the aesthetics and various theories of editing.

RTV 5596. Immersive Video Production (3). Prerequisite: Admission to the Public Interest Media and Communication major, or instructor permission. This course explores a range of new camera technology and software that allows for the post-production of immersive media, and identifies best practices for producing, shooting, editing and displaying immersive video products.

RTV 5605. Advocacy Video Theory and Practice (3). Prerequisite: Admission to PIMC major or instructor permission. This course explores the theory and practice of short-form video production. The course also examines the social media distribution possibilities for these videos.

RTV 5702. Communication Regulation and Policy (3). This course studies laws, regulations and policies for broadcasting, cable, telephone, and computer-communication industries.

RTV 6425r. Advanced Seminar in New Communication Technologies (3–6). This course is a doctoral-level seminar in the use of new communication technologies for information and entertainment. May be repeated to a maximum of six semester hours.

SED 5346. Teaching Oral Communication Courses (3). This seminar examines the critical and practical dimensions of evaluating student's speeches and presentations. Current research and theory on college level instruction is also explored.

SPC 5234. Classical Theories of Rhetoric (3). In this course, students examine the origins of rhetorical theory during the classical period of Greece and Rome. The course focus rests on the rhetorical theories of Plato, Aristotle, Cicero, and Quintilian.

SPC 5442. Group Dynamics and Leadership (3). This course is a review of important concepts and research in group process and group leadership.

SPC 5545. Studies in Persuasion (3). This course involves lecture, readings, and discussion of human behavior theories as applied to persuasive communication.

SPC 6306. Contemporary Topics in Interpersonal Communication (3). This course is a forum for the in-depth examination of topics related to interpersonal communication theory and research. Topics include self-concept, verbal and nonverbal coding, listening, etc.

SPC 6715. Race, Culture, and Communication (3). This course is designed to give an advanced perspective on the study of race, ethnicities, and culture. As such, students have the opportunity to explore what constitutes communication competence when interacting with others with vastly different values and perspectives through experimental exercises and empirical research.

SPC 6920r. Colloquium in Speech Communication (3). This course is a survey of issues of immediate interest and consequence to the area of speech communication. May be repeated to a maximum of nine semester hours; duplicate registration allowed.

VIC 5006. Digital Visual Communication (3). This course focuses on the digital creation and analysis of visual messages. Emphasis is placed on digital visual literacy, message construction and interpretation, as well as on digital design principles.

School of COMMUNICATION SCIENCE AND DISORDERS Graduate Programs

COLLEGE OF COMMUNICATION AND INFORMATION

Website: <http://commdisorders.cci.fsu.edu/>

Director: Hugh Catts; **Professors:** Catts, Morris, Wood; **Associate Professors:** Farquharson, Ingvalson, Lansford; **Assistant Professors:** Barton-Hulsey, Constantino, Hall-Mills, Madden, Romano, Therrien, Tibi; **Specialty Faculty:** **Teaching Faculty III:** Nimmons, Snowden; **Teaching Faculty II:** Montgomery, Sasser; **Teaching Faculty I:** Brosnan-Maddox, Crass, Deason, Guynes

The School of Communication Science and Disorders offers programs leading to the Master of Science (MS) and the Doctor of Philosophy (PhD) degrees. The graduate degree curricula provide advanced study in speech-language pathology for students preparing for professional careers in clinical, research, and teaching environments.

The School of Communication Science and Disorders operates the **L.L. Schendel Speech and Hearing Clinic**. The clinic has a dual mission: (a) to provide effective community service that improves the communication abilities of clients and (b) to provide a teaching and clinical research laboratory that seeks to develop exemplary assessment and treatment procedures for use by our students and professionals in speech-language pathology and audiology. Innovative and relevant theory development, research, and services are viewed as unitary—the academic effort, the research effort, and the clinical effort all strive for one goal: the enhancement of the communicative well-being of the clients served.

The Communication Science and Disorders laboratories provide facilities for the study of physical and psychological aspects of sound, speech, voice, and language. The **Speech-Voice Science Laboratory** has specialized equipment enabling the analysis of duration, intensity, spectral, and fundamental frequency aspects of speech. Instrumentation and procedures for the forensic study of speech enable the detection of signals in noise and speaker identification from recorded speech samples. Computer-interfaced instrumentation is available for measuring vocal intensity and pitch, aeromechanical aspects of voice and resonance, and physiological functioning of respiration and the vocal apparatus. The **Speech and Language Sampling Laboratories** include equipment for recording, editing, and analyzing audio and video samples of speech and language discourse and social interactions. Portable equipment is available for field recordings. Software programs for analyzing language samples and summarizing results are also available. The **Speech Motor Control Laboratory** provides facilities for the study of physiological, cognitive, and linguistic factors that impact speech production in healthy adults along the aging continuum as well as in individuals with neurological disorders such as Parkinson's disease. The laboratory is equipped with specialized systems to record and analyze articulatory movements in three dimensions, the electrical activity of orofacial muscles, the activity of the autonomic nervous system, and the speech acoustic signal.

The **Language and Reading Disorders Laboratory** provides facilities and equipment for the investigation of reading, writing, and spelling, along with resources and strategies for assessing oral and written language and literacy development. Audio-video equipment, computers, and software are available for the development and evaluation of intervention strategies that can support parents and teachers working with children, adolescents, and young adults with communication delays and disorders. The **Augmentative and Alternative Communication Laboratory** provides student clinicians with opportunities to learn about the evaluation and treatment of children and adults with severe communication disorders. The facility includes dedicated electronic communication devices with voice input, switches, keyboards, software programs, and other computer-based systems. Computer laboratories available to students and faculty are equipped with a full array of software and peripherals necessary for word processing, spreadsheet applications, database management, statistical and graphic analysis, language sample analysis, instructional material development, desktop publishing, and nonlinear video editing.

The **Neuroscience Laboratory** is an interdisciplinary laboratory located in the Warren Building. A wide array of equipment and software is available to measure cognition and language. A GaitRite system assesses thirty parameters of gait in studies of the effects of cognitive load on posture, gait, and balance. A Biopac system is available for the measurement of a variety of physiological parameters including EEG, EMG, ECG, respiratory, and cardiac function.

For further information about all graduate admission and degree requirements contact: *Jennifer Kekelis, Assistant Director of Academic and Student Services, School of Communication Science and Disorders, Florida State University, Tallahassee, FL 32306-1200; phone: (850) 644-2253; e-mail: jennifer.kekelis@cci.fsu.edu.*

Master's Degree Programs

Florida State University's speech-language pathology educational program is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association. The objective of the program is to educate speech-language pathologists to function optimally in a variety of clinical and school settings and, if desired, to enable them to pursue the doctoral degree. Learning experiences involve an interaction of classroom instruction, research, and individualized clinical practicum under the close supervision of certified academic and clinical faculty. Students are encouraged to collaborate with faculty on research and clinical program development. The master's degree is offered via an on-campus program and a distance learning program.

The programs offer courses of study leading to the Master of Science (MS) degree (thesis and non-thesis options). The graduate-level programs lead to meeting the American Speech-Language Hearing Association's entry level requirements for practice as a speech-language pathologist. The Florida State Board of Education requirements or The National Council on Accreditation for Teacher Education (NCATE) requirements for teaching certificates may be achieved by speech-language pathology majors. The degree requirement for the MS in speech-language pathology can be met through on campus or distance learning programs.

A student's undergraduate background influences the time required to complete the graduate degree. Students obtaining a master's degree on campus from Florida State University generally graduate from the program in six academic semesters, which includes a semester of off-campus internship, while the distance learning master's students generally graduate from the program in nine academic semesters.

Requirements

The Florida State University School of Communication Science and Disorders requires an individual applying for a master's degree to hold a bachelor's degree. A degree in Communication Science and Disorders is highly recommended but not required. Applicants from other degree areas are encouraged to obtain prerequisites in Communication Science and Disorders. For information on prerequisites, please see the School Web site: <https://commdisorders.cci.fsu.edu>. Applicants for admission to the master's degree programs must meet the University's minimum standard of a 3.0 upper division GPA and completion of the verbal, quantitative, and writing sections of the Graduate Record Examination (GRE) before an application will be considered by the School. Meeting the minimum requirements does not guarantee acceptance for graduate study in the School as admission is competitive. Prospective students must apply to the University and pay the University application fee before their file will be reviewed at the School level. Applicants must submit copies of official transcripts from all post-secondary schools attended and official GRE scores from the Educational Testing Service to the Office of Graduate Admissions. Typically, admission is for the Fall semester for both the on-campus program and the distance learning program. There are additional requirements and procedures for admission to the program. Please see the department Web site at <http://commdisorders.cci.fsu.edu/> for submission dates of application materials and additional information.

Students in the master's degree programs are required to complete a research project (i.e., thesis or directed research activity). All graduate students completing a thesis are required to present a program of study acceptable to the major professor and supervisory committee. The program of study should be approved before the conclusion of the first semester of course work. In general, a minimum of six semesters is typically required for the completion of the on-campus master's degree; completion of the distance learning master's degree is typically a minimum of nine semesters.

Doctoral Degree

Admission to the doctoral program is contingent upon meeting the Florida State University policy on admissions. Academic standards, residence, and transfer credits are in accordance with regulations of the University. Normally, admission is during the Fall semester. Application for the following academic year should be submitted by March 1st.

The student must hold a bachelor's degree for consideration of entry into the doctoral program. A minimum overall GPA of 3.0 (on a scale of A = 4.0) maintained in the student's junior and senior years of undergraduate education is required. A minimum of a 3.5 GPA in the student's major area of study in undergraduate and graduate education is required. An exception to the GPA requirement may be made by the doctoral admission committee if strong evidence of academic potential is presented. This evidence must include completion of the verbal, quantitative, and writing sections of the GRE. There are additional requirements and procedures for admission to the program. Please see the department Web site at <http://commdisorders.cci.fsu.edu/> for additional information.

Upon acceptance into the doctoral program, the School director will appoint the major professor. The appointment must be mutually agreeable to the student, major professor, and School director. By the end of the first year of the program, the student should invite selected faculty to form a doctoral supervisory committee. The doctoral supervisory committee shall be composed of a minimum of four members, including the major professor, who will serve until the student is advanced to candidacy. All committee members must hold doctoral directive status, and one member with this status must be selected from a different department (University Representative). At least two members must be from within the School of Communication Science and Disorders. Students may choose to include up to two members from other departments in light of the interdisciplinary course work taken by students in the department.

The first three to five semesters of enrollment in the program should be devoted to completion of the core requirements. By the end of the first year of the program, the student must present an approved plan of study to fulfill all requirements for the PhD. The plan of study should include **all** graduate-level courses previously completed. The program of study should include a narrative statement of the student's career goals, all graduate level courses previously completed, and all courses that the student is planning on taking to meet the core requirements and additional requirements, as delineated below, as well as a timeline for completion. The doctoral supervisory committee must approve the program of study in writing and may approve any course(s) already completed to apply toward meeting the core requirements. The student is encouraged to ask the major professor for samples of programs of study completed by former students.

Requirements

The doctoral program in Communication Science and Disorders is individualized to meet the student's needs and interests based on his/her career goals. The student must demonstrate knowledge beyond the master's level in three areas:

1. Research Methods (fifteen semester hours)
2. Communication Processes in Normal and/or Disordered Populations (nine semester hours)
3. A Related Specialization area (twelve semester hours).

Students must also meet three additional requirements:

- a. The student must demonstrate teaching competencies by taking major responsibility for teaching at least one undergraduate lecture course. The student must enroll in three to five semester hours of SPA 5940, Supervised Teaching.
- b. The student must demonstrate research competencies by participating in different roles in ongoing research of the major professor or more advanced doctoral students and taking major responsibility for initiating a research project. The student must enroll in three to five semester hours of SPA 5910, Supervised Research.
- c. The student must enroll in the departmental Doctoral Research Colloquium and Doctoral Seminar on Teaching and Supervision (SPA 6804; both are variable credit ranging from zero to three semester hours, repeatable to twelve hours) for a minimum of two semester hours each during the Fall and Spring semesters totaling four semesters over the first two years in the program and before advancing to candidacy.

Candidacy for the Doctor of Philosophy (PhD) Degree

Advancement to candidacy for the PhD degree is contingent upon the student successfully passing a preliminary examination. The preliminary exam is designed to demonstrate competency in a topic area(s) pertinent to the student's field of interest as well as the ability to write and critique scholarly papers. The student's committee must approve the format and content of the specific products before the student initiates the preliminary exam. It is recommended that the three written products be completed within one to two semesters.

1. Written Response to Committee Question(s).

The student must write extensively on a topic(s) selected and approved by the committee. The question(s) will come from a pool of questions submitted by the student to his/her advisor and agreed upon by the committee. The student must complete the question(s) within two days, thus, the expectation is not for a fully polished product. Instead, the response should demonstrate a command of research, reflected in an ability to compile and critically analyze a body of literature (or salient aspects of a complex question) in a relatively short time span. The written response should be no more than ten pages, double spaced (excluding references). During the writing time, the student may not consult with anyone, but may utilize any other resources available to

him/her (books, articles, presentations). The student will designate the start date for completing the written response, with approval of the major professor.

2. Journal Article Critique.

The student will critique a prepublication manuscript or published article as if it was submitted to a journal for publication with the student serving as a guest reviewer. The major professor will choose the article with input from committee members with the student's area of interest and future research objectives in mind. The article critique typically is no more than four pages single-spaced; often, it is shorter. The student will designate the start date for completing the article critique. Where possible, the research design of the journal article will differ from that of the design in the creative product.

3. Creative Product.

The third written product may take one of two forms, depending on the student's interests and future employment objectives:

- a. The student may write a traditional research grant proposal following Public Health Service or other appropriate guidelines. The scope of the work proposed should entail multiple years; thus, it might include multiple projects or at least a multi-faceted project.
- b. The student may write a manuscript that is suitable for submission to a journal. The manuscript should entail original research that the student has designed and carried out (e.g., a report of an experimental research study, a program evaluation, a policy analysis, or another original product). The manuscript should not have any fatal flaws in regard to support for the need and rationale for the study, threats to validity, appropriate statistical analysis, appropriate interpretation of results, and clarity/organization of writing.

The student is expected to work fairly independently on the creative product. The student should submit a final draft to the major professor. The major professor may make suggestions one time regarding content that is missing or superfluous, the organization of the product and synthesis of information, and APA writing style.

The major professor will be the gatekeeper of the products and decide if the products are ready to send to the committee and if the student is ready to schedule the oral examination. Upon notification from the major professor, the student will send three written products to the committee at least two weeks prior to the scheduled oral examination. The student should provide each committee member with a hard copy of the preliminary exam, unless a committee member prefers an electronic copy. If the major professor believes, after providing feedback to the student for the creative product, that the products are not passable and should not be sent to the committee, the advisor will advise the student. At that point, the student has the option of either moving forward with a full committee review or pulling the manuscript and suggesting an alternative creative product. This latter option will be offered only once.

Dissertation

Upon advancement to candidacy, the student should begin working on the dissertation. The dissertation is the final requirement for the doctoral degree. A student must be admitted to candidacy at least six months prior to the granting of the doctoral degree. All requirements for the doctoral degree, including filing an approved dissertation, must be completed within five calendar years from the time the student is advanced for candidacy.

Definition of Prefix

SPA—Speech Pathology and Audiology

Graduate Courses

SPA 5005. Communication Science & Disorders: Assessment & Treatment (3). This course provides students with a solid overview of the main types of communication disorders, including causes, symptoms, assessment, treatment, potential outcomes, and ethical considerations. The course is organized in six related but distinct thematic units to facilitate student content mastery, which are monitored through formative and summative assessments.

SPA 5009. Normal Communication Development and Disorders (4). This course provides an overview of the fundamental bases of language development and their disorders. The knowledge and skills acquired in this course are pivotal to preparing future professionals for a variety of careers and scientific inquiry. Knowledge of typical language development is essential for a variety of professions such as working in an educational setting or child-care capacity, working with individuals with communication disorders, or conducting related research. This overview serves as a foundation for advanced coursework.

SPA 5012. Introduction to Communication Science (4). This course provides an overview of the speech sciences. Information integrates scientific material relating to the acoustics, anatomy, and physiology of speech production and perception. Specific topics include sound, respiration, phonation, articulation, audition, and the nervous system along with clinical cases that affect these areas of speech science. This introductory course is expected to serve as a basis for understanding the science of speech and to provide a foundation for advanced graduate-level coursework in speech functions.

SPA 5033. Introduction to Clinical Audiology (4). This course introduces the field and practice of audiology as a prerequisite to graduate studies in Communication Sciences and Disorders or as a supplement to studies in related fields. Topics include the nature, measurement, and perception of sound; basic anatomy and physiology of the human auditory system; the nature, causes, and effects of hearing impairment; basic hearing assessment; treatment options for hearing impairment; as well as information regarding assessment and treatment of special populations.

SPA 5055r. Professional Tools in Speech-Language Pathology (1-3). This course is the first of two courses relating professional tools for the graduate program in speech-language pathology. This course familiarizes students with the professional issues currently facing the profession.

SPA 5058. Clinical Methods (4). This course introduces students to clinical practice in speech-language pathology. Students become acquainted with the scope of practice, ethical obligations and supervision of the SLPA, medical billing and documentation, implementing treatment plans, intervention strategies and techniques, service delivery options, behavior management and data collection.

SPA 5102. Neurological Basis of Communication (4). This course provides an overview of the normal neuroanatomy and neurophysiology of human communication (speech, language, and hearing), while also covering introductory information related to neuropathologies and clinical causes that affect communication. This course serves as a basis for understanding the normative and pathological processes that affect human communication and provides a foundation for advanced, graduate-level coursework in speech, language, and cognitive functions. Classes are primarily lecture based and are supplemented by videotapes, illustrations, handouts, in-class review activities, and Internet activities. Lectures follow the text, but not necessarily in order of the chapters.

SPA 5103. Anatomy and Physiology: Speech, Language, and Hearing (4). This course provides the foundation for advanced study in communication science and disorders. Understanding the normal structure and function brings about an increased understanding of the pathology present in the myriad of patient populations encountered in future practical experiences as an SLP student clinician and, later, in practice. Students learn about the nature of communication and swallowing, primarily their anatomic, physiologic, acoustic, and perceptual characteristics.

SPA 5113. Clinical Phonetics (4). This course focuses on learning to phonetically transcribe spoken language. Students learn and frequently practice transcription of vowels and consonants at the levels of isolation, syllables, words, phrases, and connected speech. The course also incorporates relevant material covering phonetics as a science, the similarities and differences between spelling and sound, anatomy and physiology of the speech mechanism, clinical phonetics, and dialectal variation in spoken language.

SPA 5204. Phonological Disorders (3). This course identifies and examines traditional and psycholinguistic theory and approaches to management of defective articulation. Provides the student with training in the treatment of defective articulation.

SPA 5211. Voice Disorders (3). This course is concerned with etiology, symptoms, and remediation of a variety of organic voice disorders.

SPA 5225. Fluency Disorders (3). This course emphasizes theories of treatment of stuttering disorders, various therapeutic approaches.

SPA 5230. Motor Speech Disorders (3). This course covers diagnostic and therapeutic procedures employed in the management of speech and language problems of neurologically impaired persons.

SPA 5252. Speech Production and Swallowing Disorders (3). This is a foundation course to prepare SLP students to evaluate and manage communication disorders of voice, fluency, and articulation plus dysphasia and laryngectomy.

SPA 5254. Acquired Neurolinguistic and Cognitive Disorders (3). This is a foundation course to prepare SLP students to evaluate and manage neuromotor speech disorders, aphasia, traumatic brain injury, right hemisphere syndromes, dementia, and communication effects of progressive neurological diseases.

SPA 5256. Developmental Speech Disorders (3). This course is an overview of the developmental disorders that affect children's speech. Topics include cleft lip, palate and other craniofacial anomalies, developmental apraxia of speech and the dysarthrias.

SPA 5305Lr. Measurement and Management of Impaired Hearing (1-3). This course covers interviewing, audiologic screening, audiometric evaluation, data interpretation, hearing aids and cochlear implants, assistive listening devices, aural rehabilitation assessment and therapy, and hearing conservation.

SPA 5322. Advanced Aural (Re)habilitation (3). This course covers amplification devices, assessment of hearing impairment; perception of speech, receptive communication strategies.

SPA 5401. Communication Intervention: Infants and Preschoolers (3). Prerequisites: LIN 3710, SPA 4400, or instructor permission. This course explores strategies for the assessment and intervention of communication and symbolic abilities of infants (0-2) and children (3-5) with atypical communication development. Emphasis is on using a family focused approach in home based and center based programs.

SPA 5403. Language-Learning Disabilities in School-Age Children (3). Prerequisites: LIN 3710 and SPA 4400. This course explores strategies for assessment and intervention of conversational, narrative, and meta-linguistic abilities of school-age children and adolescents with language-learning disabilities.

SPA 5432. Autism and Severe Communicative Disabilities (3). This course explores strategies for language and communication assessment and intervention of children, adolescents, and adults with autism and other severe communicative disabilities. Includes functional analysis of challenging behaviors and decision making for the selection of augmentative communication systems.

SPA 5436. Nature of Autism (3). This course provides an overview of the characteristics and etiology of autism spectrum disorders and the basic knowledge needed to develop effective instructional plans and to enhance reading, communication, and social interactions at home, at school, and in the community.

SPA 5460. Foundations of Developmental Communication Disorders (3). This course provides an overview of language and phonological impairments. The course prepares students to facilitate development in children's learning systems while taking into account the contextually-based needs of children with developmental communicative disorders.

SPA 5462. Developmental Communication Disorders: School-Age Issues (3). Prerequisite: SPA 5460. This course prepares speech-language pathologists to evaluate and manage developmental communication disorders in conjunction with families, educators, and other service providers. Focus is on applications to the selection of functional treatment goals and the development of effective treatment programs.

SPA 5500. Clinical Practicum in the Schools (3). This course provides supervised therapy practice in therapy procedures with school-aged persons presenting various communication problems. Seminar covers educational and therapy topics relative to public professional activities.

SPA 5505r. Advanced Clinical Practicum (1-4). This course provides students with the opportunity to build and practice more advanced clinical skills as they continue their clinical rotations. Maybe be taken for credit for a total of four semester hours.

SPA 5522. Medical Speech Pathology (3). This course exposes students to the concepts, policies and procedures encountered in medical settings. The primary goal is to make students more comfortable upon entering the medical setting in offsite practicums.

SPA 5526Lr. Laboratory in Child Speech/Language Pathology Diagnostics (1-3). This course provides completion of formal and informal evaluation procedures with children who have speech and/or language disorders. May be repeated to a maximum of twelve semester hours.

SPA 5528Lr. Laboratory in Adult Speech/Language Pathology Diagnostics (1-3). This course provides completion of formal and informal evaluation procedures with adults who have speech and/or language disorders. May be repeated to a maximum of twelve semester hours.

SPA 5553. Seminar in Clinical Differential Diagnostics (2). This course is a discussion of formal and informal assessment of a variety of speech and language disorders. Students discuss content related to individuals evaluated during accompanying laboratory. The course teaches students to integrate screening and prevention procedures into practice; review evaluation/assessment instruments; utilize diagnostic results; and interpret, integrate, and synthesize test results, observations, and samples to develop diagnoses with all content reflected in written form (diagnostic report).

SPA 5554. Counseling in Speech-Language Pathology (3). This course covers supervision, counseling, and interviewing in the area of communication disorders.

SPA 5554Lr. Supervision and Counseling in Communication Disorders (1). This is a laboratory course to practice strategies and skills in clinical supervision and counseling. The dyads of clinician-patient, clinician-significant other, and the triad of supervisor, supervisee, and patient are emphasized. May be repeated to a maximum of three semester hours.

SPA 5559. Augmentative Communication Systems (3). This course provides an overview of augmentative and alternative communication systems (AAC) and the process for selecting and implementing these systems. The course also covers application of AAC systems for nonspeaking individuals with developmental and acquired disorders.

SPA 5562. Advanced Seminar in Augmentative and Alternative Communication Systems (1-3). This course focuses on a variety of topics related to AAC assessment, intervention, and clinical research for people with severe communication disorders. Students are encouraged to participate in related research activities in various phases of ongoing projects.

SPA 5565. Seminar in Dysphagia (3). This course covers a review of the anatomy, neurology, and function of the normal swallow. Etiologies and types of dysphagia in children and adults. Evaluation and management of swallowing disorders. Prior anatomy and neurology courses are recommended.

SPA 5646. Communication for Persons Deaf and Hard of Hearing (3). This course covers assessment and education procedures for developing communication skills of preschool and school-age hearing impaired students.

SPA 5906r. Directed Individual Study (1-3). (S/U grade only). May be repeated to a maximum of eight semester hours. Students may enroll in more than one section during the same semester.

SPA 5910r. Supervised Research (1-5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three semester hours may apply to the master's degree. Students may enroll in more than one section during the same semester.

SPA 5940r. Supervised Teaching (1–5). (S/U grade only). This course gives advanced graduate students the opportunity to organize and teach basic courses in audiology and speech-language pathology under the direct supervision of faculty. May be repeated to a maximum of five semester hours. A maximum of three semester hours may apply to the master's degree.

SPA 5941r. Beginning Speech-Language Pathology Practicum (1–4). (S/U grade only). This course provides students with the opportunity to build basic clinical competence in the area of speech-language pathology. Students are introduced to diagnostic and therapeutic clinical processes as they relate to clients of various ages and disorder types. May be repeated to a maximum of four semester hours.

SPA 5942r. Community Clinical Practicum (1–4). This clinical practicum provides students with supervised experiences in a variety of community-based settings. May be repeated to a maximum of four semester hours.

SPA 5944. Speech-Language Pathology Internship (1–12). (S/U grade only). This course provides intensive practical experience in the diagnosis and/or treatment of persons with speech-language and hearing disorders in service oriented professional settings under the close supervision of persons who have clinical certification from the American Speech-Language-Hearing Association. Students complete this course in the final semester of the master's program.

SPA 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours must be earned.

SPA 6140r. Seminar in Experimental Phonetics (1–3). This course examines phonetics experimentation through review of relevant journal articles and participation in speech recording, measurements, and analysis. The focus is on one of the three phonetic areas: physiologic, acoustic or perceptual. May be repeated to a maximum of nine semester hours.

SPA 6231r. Seminar in Neuropathologies (1–3). May be repeated from term to term to a maximum of nine semester hours.

SPA 6434r. Seminar on Developmental Disabilities (1–3). This course provides advanced graduate students with an opportunity to study and analyze current issues affecting children with developmental disabilities, including the families of these children and their communities. Students examine cross-disciplinary contributions to developmental disabilities research, service, and policies. May be repeated to a maximum of nine semester hours.

SPA 6804r. University Academic and Clinical Teaching Colloquium (0–2). (S/U grade only). This course is designed to provide doctoral students with information and essential skills for teaching in the university environment. May be repeated to a maximum of twelve semester hours.

SPA 6805r. Seminar in Clinical Research Methods (3). This course advances students' knowledge of research methods used to study clinical problems and to evaluate intervention techniques used in speech-language pathology and other educational endeavors. Current research literature is examined to critique the research methods used to address specific issues selected by students. May be repeated to a maximum of nine semester hours.

SPA 6825r. Seminar in Speech Pathology (1–3). This course is an advanced study of communication disorders, including review of literature and critique of research methodology. May be repeated from term to term, to a maximum of nine semester hours.

SPA 6841r. Seminar in Language (1–3). May be repeated from term to term, to a maximum of nine semester hours.

SPA 6900r. Readings for the Preliminary Examination (1–6). (S/U grade only). Prerequisites: Doctoral standing and department approval. This course is to be taken prior to or during the semester the student registers for the preliminary examination. May be repeated to a maximum of six semester hours.

SPA 6930r. Seminar in Special Topics (1–3). This course content varies as faculty offers different issues and special topics concerning the discipline. May be repeated from term to term to a maximum of nine semester hours. Students may enroll in more than one section during the same semester.

SPA 6980r. Dissertation (1–12). (S/U grade only).

SPA 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

SPA 8967r. Advanced Master's Comprehensive Examination (0). (P/F grade only.)

SPA 8976. Master's Thesis Defense (0). (P/F grade only.)

SPA 8977r. Advanced Master's Thesis Defense (0). (P/F grade only.)

SPA 8985. Dissertation Defense (0). (P/F grade only.)

COMPUTATIONAL NUMERICAL METHODS:
see Mathematics

**COMPUTER APPLICATIONS CONCEPTS, DESIGN
AND ARCHITECTURE, INFORMATION SYSTEMS, AND
PROGRAMMING:**
see Computer Science

COMMUNITY PSYCHOLOGY:
see Psychology

COMPARATIVE POLITICS:
see Asian Studies; Political Science

COMPARATIVE PSYCHOLOGY:
see Psychology

COMPUTATIONAL BIOLOGY:
see Mathematics

Graduate Department of COMPUTER SCIENCE

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.cs.fsu.edu/>

Chair: Xin Yuan; **Professors:** Aggarwal, Burmester, Hawkes, Liu, Mascagni, G. Tyson, A. Wang, Whalley, Yu, Yuan, Z. Zhang; **Associate Professors:** Duan, Haiduc, Kumar, Schwartz, Z. Wang, Yang, Zhao; **Assistant Professors:** Chakraborty, Feduykovich, Gao, Gubanov, Hoang, Kuhnle, J. Zhang; **Courtesy Professors:** Baker, De Medeiros, Jones, Lacher, Levitz, Li, Oral, Pakin, X. Wang; **Computing Resources Manager:** Y. Wang; **Teaching Faculty I:** Dorai, Jayaraman, Mills, M. Myers; **Teaching Faculty III:** Gaitros, Langley, B. Myers, A. Tyson; **Professors Emeriti:** Baker, Lacher, Levitz

In Computer Science education, whether graduate or undergraduate, being current is essential. Computer Science is an exceptionally fast-moving field, where knowledge is subject to rapid obsolescence and ideas progress swiftly from research to practice. The department, therefore, seeks to offer technical instruction that keeps on the cutting edge of new developments, while simultaneously providing each student with a core of intellectual tools that will never become obsolete. The department views skills in communication, mathematics, and algorithmic reasoning as central and the understanding of underlying principles as more important than familiarity with specific technical products. Still, direct hands-on experience is essential to mastering these skills and principles. If students are to be adequately prepared for careers in Computer Science, they should have extensive experience with machines and software that are state-of-the-art.

The Department of Computer Science offers graduate programs leading to the Master of Science (MS) and Doctor of Philosophy (PhD) degrees. The department has a number of active research programs in:

- core disciplines such as programming languages, compilers, storage systems, networks, parallel computation, databases, fault tolerance, and foundations;
- scientific and engineering applications areas, including scientific problem-solving environments and large-scale scientific computation and databases;
- offensive and defensive security for computers and networks, cryptography; and
- other areas including but not limited to: random number generation, software maintenance, cloud computing, big data, mobile programming, neural networks, expert networks and fuzzy sets and systems.

These research programs enjoy external support from agencies ranging from the National Science Foundation to the private sector.

The Department of Computer Science has a full range of computing facilities available for a variety of instructional and research needs. Faculty and graduate students share high-performance workstations, file servers, and compute servers. Students and faculty whose research requires higher computational power have access to a variety of state-of-the-art machines, including supercomputers and computer clusters, across the University.

Other affiliated research laboratories include the following:

The **Center for Security and Assurance in Information Technology (C-SAIT) Laboratory** was established in 2000. Its mission is to serve as a focal point for members of different academic disciplines, government, and industry to carry out world-class research and to advance the practice and public awareness of information technology security and assurance through education and public service. C-SAIT is dedicated to the synthesis of education and research through combined focus on the theory and applications of Information Security. The primary research function of the Center is to provide an environment that fosters world-class applied research in information security technology, with a focus on innovation and learning.

The **Computer Architecture and Systems Laboratory (CASTL)** has broad research interests in novel architectural and system technologies for big data analytics, cloud computing, high-performance computer and network systems, and the use of these technologies for fast scientific discoveries on computational biology and climate changes.

The **EXPLORER Laboratory (Extreme-Scale Computing, Modeling, Networking & Systems Research)** is a group of researchers who share common interests in exploring cutting-edge technologies for designing, evaluating, constructing, programming, and using extreme-scale distributed computing systems including super-computing systems, cloud computing data centers, networked computing systems, heterogeneous computing systems, and Internet of things, and developing, implementing, and evaluating techniques at the architecture, systems, and applications levels that advance the state-of-the-art distributed computing in cost-effectiveness, scalability, power-efficiency, reliability, security, and ease-of-use.

The **Serene Lab (Software Engineering: Evolution and Maintenance Lab @ FSU)** is dedicated to research in the field of Software Engineering and focusing on novel approaches and techniques to assist software developers in undertaking tasks common to the creation, understanding, and maintenance of increasingly large software systems. The main research topics of the group are: Software maintenance and evolution, Programming Comprehension, Mining of Software Repositories, Source Code Analysis, Empirical Studies in Software Engineering, Applications of Information Retrieval and Natural Language Processing in Software Engineering, Online Software Documentation, and Developers' Performance.

Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Please refer to <http://www.cs.fsu.edu/admissions/graduate-admissions/> for the most current information.

A student who proposes to do graduate work in the department is required to take the aptitude test of the Graduate Record Examinations (GRE).

Unless specifically admitted into the part-time graduate program, all students are required to maintain full-time enrollment (excluding Summers) in courses related to their program of study throughout the entire program of study. The student must receive a grade of "B-" or better on all graduate courses counting toward the graduate degree. All work for the master's degree, including any transferred credit, must be completed within seven calendar years of the date of graduation.

All candidates for doctoral degrees in the department are required to participate in teaching activities at some time during their graduate careers unless waived by the department chair. All students are required to complete an exit survey for both the Department of Computer Science and the College of Arts and Sciences during their term of graduation.

Master's Degree

MS in Computer Science

The department offers three majors at the master's level: Computer Science, Computer Network and System Administration, and Cyber Security. Each major offers thesis, project, and course-based options.

Eligible PhD students wishing to pursue the MS must have the intention of continuing their PhD program and must first pass the PhD Qualifying Exam, CIS 8962, before applying for the MS.

Both the Computer Science and Cyber Security undergraduate majors have the following prerequisite requirements prior to being admitted to the PhD in Computer Science and the MS majors of the Computer Science degree in the two aforementioned options:

Undergraduate Prerequisites for the MS/PhD in Computer Science and MS in Cyber Security degree options:

CDA 3101	Computer Organization II (3)
COP 4530	Data Structures, Algorithms, and Generic Programming (3)
COP 4610	Introduction to Operating Systems (3)
COT 4420	Theory of Computation (3)

Undergraduate Prerequisites for the MS CNSA Degree Program

CDA 3101	Computer Organization II (3)
COP 4530	Data Structures, Algorithms, and Generic Programming (3)
COP 4610	Introduction to Operating Systems (3)

In the Computer Science and Cyber Security majors, a student must complete thirty semester hours in computer science courses numbered 5000 or above, including approved CIS 5930 and CIS 6930. At most one course outside the department at the 5000 or 6000 level can also count towards the thirty hours if approved by the major professor. Supervised teaching, supervised research, seminars, directed individual study, and courses with prefix CGS are excluded. For the Computer Science and Cyber Security majors, at least one course from each of the following three core areas must be taken to satisfy the area requirements:

Software

COP 5570	Concurrent, Parallel, and Distributed Programming (3)
COP 5621	Compiler Construction (3)
COP 5725	Database Systems (3)

Systems

CDA 5155	Computer Architecture (3)
CNT 5505	Data and Computer Communications (3)

COP 5611 Advanced Operating Systems (3)

Theory

COT 5310 Theory of Automata and Formal Languages (3)

COT 5405 Advanced Algorithms (3)

COT 5507 Analytical Methods in Computer Science (3)

Note: The Computer and Network System Administration major does not require a Theory course. In addition to not requiring a Theory course, the CNSA major has the Software and Systems requirement fulfilled in its list of required courses. CNSA requirements are defined below.

Cyber Security Major

A student in the cyber security major is required to meet all the course requirements of the MS in Computer Science, but is also required to take the following courses; those marked with a "*" also satisfy the area requirements:

CIS 5370 Computer Security (3)

CIS 5371 Cryptography (3)

CNT 5412 Network Security, Active and Passive Defenses (3)

CNT 5505 Data and Computer Communications (3)

CNT 5605 Computer and Network Administration (3)

plus **one** of the following courses:

COP 5570 Concurrent, Parallel, and Distributed Programming (3)*

COP 5611 Advanced Operating Systems (3)*

COT 5310 Theory of Automata and Formal Languages (3)*

COT 5405 Advanced Algorithms (3)*

Computer Network and System Administration Major

CNSA students have to complete the aforementioned undergraduate prerequisites, before graduating, and the following required courses for the CNSA major of the MS in Computer Science degree:

CDA 5155 Computer Architecture (3)

CNT 5412 Network Security, Active and Passive Defenses (3)

CNT 5505 Data and Computer Communications (3)

CNT 5605 Computer and Network Administration (3)

COP 5570 Concurrent, Parallel, and Distributed Programming (3)

COP 5611 Advanced Operating Systems (3)

In addition to the required courses, the CNSA program has an experience requirement, and students are required to complete system administration internship(s) to complete this requirement. The CNSA program works with various departments and colleges on the FSU campus to provide local systems administration internships for students.

Thesis, Project, and Course-Based Master of Science (MS) Degrees

For each major of the previously mentioned major options in the MS in Computer Science degree, a student must select one of the three options (thesis, project, or course-based) to complete the degree. Each option has a specific number of required courses as well as other requirements, as described below.

Thesis Option

In any major, a student under the thesis option must take seven courses (twenty-one semester hours) at or above the 5000 level, plus at least nine semester hours of CIS 5970r, Thesis. At most, nine semester hours of CIS 5970r may be counted toward the required thirty semester hours for the Master of Science (MS) degree. The seven courses must include at least one course from each core area as described above. Approved CIS 5930/6930 courses are counted among these, but supervised teaching, supervised research, seminars, directed individual study (DIS), and CIS 5915 may not be included. The thesis is defended by registering for CIS 8976, Master's Thesis Defense (0).

The student in the thesis option is required to propose and create an individual thesis topic of appropriate focus, size and complexity and to write a document discussing it. The thesis is to be written in accordance with the University standards. Upon completion, a thesis must be defended successfully to the department in an open forum and be approved by the major professor and supervisory committee. An electronic version of the thesis must be submitted to the Graduate School, the CS graduate coordinator, and the CS webmaster.

Project Option

In any major, a student under the project option must take eight courses (twenty-four semester hours) at or above the 5000 level, plus at least six semester hours of CIS 5915r, Graduate Software Project. At most six semester

hours of CIS 5915 may be counted toward the required thirty semester hours for the Master of Science (MS) degree. The nine courses must include at least one from each of the core areas described above. Approved CIS 5930/6930 courses are counted among these, but supervised teaching, supervised research, seminars, directed individual study (DIS), and CIS 5970 may not be included. The student also must register for CIS 8974, Master's Project Defense (0), to defend the project. An electronic version of the project must be submitted to the CS graduate coordinator and the CS webmaster.

Course-Based Option

In any major, a student under the course-based option must take ten courses (thirty semester hours) at or above the 5000 level, including at least one course from each of the three core areas detailed above. A student must earn a "B+" or higher for at least six of the ten courses in order to graduate under the course-based option. Approved CIS 5930/6930 courses count toward the ten-course requirement, but supervised teaching, seminars, directed individual study (DIS), supervised research, CIS 5915, and CIS 5970 may not be included. A student must also register for CIS 8966, Master's Comprehensive Examination (0), the semester of graduation.

Supervisory Committee

For the thesis and project options, it is the student's responsibility to form a supervisory committee regardless of his or her selected major. No later than the beginning of work on the thesis or project, the student must secure the consent of an eligible computer science faculty member to serve as the major professor. In consultation with the major professor, the student must secure the consent of at least two additional graduate faculty members to serve as the supervisory committee, chaired by the major professor.

Doctoral Degree

The Doctor of Philosophy is regarded as a research degree and is awarded on the basis of accomplishment in a recognized specialty in computer science. Such accomplishment should include scholarly mastery of the field, significant contributions to new knowledge in the field, and written and oral communication skills appropriate for the field.

The requirements for the PhD include the following: passing CIS 8962, the qualifying examination (portfolio defense), and CIS 8964, preliminary examination (area survey); satisfaction of the course requirements; successfully defending a dissertation prospectus; and successfully defending a dissertation. All candidates for doctoral degrees in the department are required to participate in teaching activities at some time during their graduate careers unless waived by the department chair. Additionally, each doctoral student must complete at least one oral research presentation which is critiqued by at least one faculty member. This can be at the departmental research conference or any discipline-related conference.

Course Requirements

Doctoral students must complete four core courses (twelve hours), one course in each of the three areas (Software, Systems, and Theory) plus one additional core course from any of the three core areas. Equivalent courses taken at other institutions must be approved by the Portfolio Evaluation Committee (PEC).

Students entering the program after earning a master's degree in Computer Science or related area must take at least four additional courses (twelve hours) beyond those taken for the MS degree, at the 5000 or 6000 level, as advised by the student's major professor and supervisory committee. These courses must be taken at FSU and a maximum of two courses (six hours) may come from outside of the department that were not previously used in the completion of a previous degree. Core courses can also be used to meet this "four additional courses" requirement provided they are taken at FSU and were not completed as part of an MS program. Supervised teaching, supervised research, DIS, and courses with prefix CGS do not count towards this requirement.

Students entering the program after earning a bachelor's degree in computer science or related area must take at least nine courses (twenty-seven hours) at the 5000 or 6000 level, as advised by the student's major professor and supervisory committee. Four of these courses (twelve hours) must meet the PhD core course requirement. The four courses (twelve hours) must be taken at FSU and cannot be part of an MS degree program outside of the FSU Computer Science Department. A maximum of two courses (six hours) may come from outside of the Computer Science Department. Supervised teaching, supervised research, DIS, and courses with prefix CGS do not count towards this requirement that were not used in the attainment of a previous degree.

The student's PhD committee can require the student to take more than the aforementioned number of courses. The student must receive a grade of "B–"

or better on all graduate courses taken to satisfy the minimum course requirements of the degree. Once these minimum requirements are met, however, it is permissible to take any subsequent courses on an S/U basis.

The doctoral student must also complete at least twenty-four hours of CIS 6980r, Dissertation. A student may enroll in CIS 6980r only after being admitted to candidacy. Once admitted to candidacy, students must be enrolled for a minimum of two dissertation hours each semester until completion of the degree. The student must graduate with the doctoral degree within five years of being admitted to doctoral candidacy.

Major Professor and Supervisory Committee

As early as is feasible in the student's program, the student should identify an area for dissertation research and secure an informal agreement with a faculty member to serve as the student's major professor. This agreement should include an understanding as to the area and timeline of the dissertation research. This agreement is formalized when the department chair appoints that faculty member to serve in this capacity. In a similar manner, the student must secure agreements with, and the chair must approve, the remaining members of the student's supervisory committee. This committee must consist of one additional faculty member of the department and one member of the graduate faculty in another department as the University Representative. In addition, the chair will appoint a member to serve as departmental representative. All members must hold graduate faculty status and the University Representative must be a tenured member of the faculty.

The supervisory committee is responsible for approving an individual program of study, possibly including additional course requirements, and verifying that the student satisfies the following departmental requirements. The area examination, prospectus, and dissertation defenses must be unanimously approved by the major professor and supervisory committee.

Qualifying Examination (Student Portfolio Defense)

The PhD Portfolio is intended to provide the department with a complete view of the student's accomplishments and abilities that relate to likelihood of success as a PhD professional. The portfolio is reviewed regularly by the Portfolio Evaluation Committee to determine whether the student is making suitable progress towards the degree and must be completed with a list of the satisfactory grades ("B" or higher) for the four core graduate courses when the student takes the Doctoral Qualifying Exam. Based on the completion of the portfolio, a student can enroll in CIS 8962, Doctoral Qualifying Exam. A passing grade "P" for the CIS 8962, Doctoral Qualifying Exam, is one of the two required components of admission to candidacy.

The student should be enrolled in CIS 8962 (Doctoral Qualifying Exam) when he or she has completed the four core graduate courses, completed the portfolio, and both the student and major professor agree that the student is ready to take the Doctoral Qualifying Exam. (Doctoral Qualifying Exams may be scheduled for Fall or Spring semester, but not Summer semester). The Portfolio Evaluation Committee will schedule and conduct the Doctoral Qualifying Exam during the semester. The exam will be oral and will cover the four core graduate courses taken by the student. The student will be tested on the four core graduate course topics. The student is strongly advised to study the core course topics well in advance in preparation for the Doctoral Qualifying Exam. Students that obtain an "A or A-" in any of the core subjects will be exempt from that portion of the oral exam. If a student gets all "A or A-"s in the four core classes used for the Qualifying Exam, that student will still need to submit a copy of the portfolio to the Portfolio Review Committee.

All students admitted to the program but not yet admitted to candidacy, are required to compile and keep current a portfolio containing information relevant to the student's progress in the program. Required contents of the portfolio, submission dates, and guidelines for preparing the portfolio are found at <http://www.cs.fsu.edu/academics/graduate-programs/portfolio/>.

A student cannot take the Doctoral Qualifying Exam if he or she has not completed the four core graduate courses. However, there is one exception to this rule. A student who has received satisfactory grades with a cumulative GPA of 3.5 or higher for all but one of the core courses can take the Qualifying Exam in the Spring term in which the last core course is being taken, assuming that the Qualifying Exams take place after spring break. In that case, the student is expected to be able to answer questions about all of the four core courses, including the core course currently being taken. If the student passes the oral, the exam is not recorded as passed until after the end of the term and the chair of the Portfolio Evaluation Committee has verified that the remaining core course has been passed with an acceptable grade.

The portfolio of any student not yet in candidacy is reviewed annually by the departmental Portfolio Review Committee (PRC). This committee consists of a core that is appointed by the Department Chair and normally meets in the Spring. Feedback to the student on the contents of the portfolio and on progress toward admission to candidacy is provided after each review.

The final review occurs in conjunction with the defense of the portfolio. Thus, when a student and his or her major professor agree the portfolio is complete, the student should register for the Doctoral Qualifying Exam, CIS 8962 (0), for the next semester. At most, students can take the Qualifying Exam twice. A student either passes or fails; there is no conditional pass.

Preliminary Examination (Area Survey)

The preliminary examination (area survey), CIS 8964, covers the student's intended area of research. It has both written and oral parts. Both parts of the examination are conducted by the student's supervisory committee, which may delegate the responsibility to a larger area committee. It is strongly recommended that the student write an area survey paper as part of this exam. The oral part is open to all department faculty members having doctoral status who elect to participate. The oral part of the examination is held in an open forum that other students are invited to attend and is followed by a closed session if the committee so desires. Students who do not pass the area exam may be advised to retake it at a later time. A student who changes to a new research area after having previously passed this exam will be required to stand for a further exam over the new area. At most, a student can fail the exam once.

Normal expectations are that the portfolio defense occurs prior to taking the area exam or at least in the same semester as the area exam. A doctoral student should take the area exam within two semesters (including summer) of passing the Qualifying Exam.

Admission to Candidacy

In order to be advanced to candidacy for the doctoral degree, the student must:

- pass CIS 8962, the qualifying examination, which consists of passing the defense of the portfolio and completion of the four core courses with a grade of "B" or better
- pass CIS 8964, the preliminary exam, which consists of passing the area examination
- complete the admission to candidacy form located at the registrar's Web site (http://registrar.fsu.edu/forms/admission_to_candidacy.pdf).

Prospectus

The student must formally propose the research to comprise the dissertation to his or her supervisory committee in the form of a prospectus. The prospectus should consist of much of the background work for the dissertation, including:

1. A thorough literature review
2. Theory, preliminary computational results, and/or bases for the feasibility of the research
3. A proposal for research to be completed for the dissertation

In addition, as an appendix to the prospectus, publication plans should be presented. The research proposed should make clear and substantial advances in the state of knowledge in computer science, and the publication plans should be designed to affirm the quality and nature of the research. Publication should be in nationally recognized conferences and journals in the field. The prospectus must be successfully defended before the student's supervisory committee in an open meeting.

Dissertation

After completing the research proposed in the prospectus, the student must write a dissertation. The dissertation represents the fulfillment of the proposals made in the prospectus. The dissertation document must comply with all current University standards for style. The dissertation must be successfully defended before the student's committee in an open meeting. The dissertation must be successfully defended within five years of passing the preliminary exam (CIS 8964). An electronic version of the dissertation must be submitted to the university as well as the CS webmaster and CS graduate coordinator.

Definition of Prefixes

- CAP—Computer Applications
- CDA—Computer Design/Architecture
- CEN—Computer Software Engineering
- CGS—Computer General Studies
- CIS—Computer Science and Information Systems
- CNT—Computer Networks
- COP—Computer Programming
- COT—Computing Theory
- ISC—Interdisciplinary Sciences

Graduate Courses

CAP 5137. Software Reverse Engineering and Malware Analysis (3). Prerequisite: CDA 3100. This course covers fundamental problems, principles, and techniques in software reverse engineering of binaries including static analysis techniques, disassembly algorithms, dynamic analysis techniques, automated static and dynamic analysis techniques, malware analysis techniques, anti-analysis techniques, and malware obfuscation and packing techniques; many of the techniques will be demonstrated and practiced using IDA. The course also involves research opportunities to analyze new malware samples and firmwares, and develop new analysis tools.

CAP 5415. Principles and Algorithms of Computer Vision (3). Prerequisite: COP 4530. This course examines the basic computational principles and algorithms to extract information from images and image sequences. Topics include imaging models, linear and nonlinear filtering, edge detection, stereopsis and motion estimation, texture modeling, segmentation and grouping, and deformable template matching for recognition.

CAP 5605. Artificial Intelligence (3). Prerequisite: COP 4530. This course is an introduction, representing knowledge, controlling attention, exploiting constraints, basic LISP programming, basic graph searching methods, game-playing and dealing with adversaries, understanding vision, theorem proving by computer, computer programs utilizing artificial intelligence techniques.

CAP 5619. Deep and Reinforcement Learning Fundamentals (3). Prerequisite: Senior or grad standing in science or engineering; or instructor permission. Requires some familiarity with basic concepts in linear algebra and probability theory, some basic knowledge of algorithm design, and programming experience with Python. This course covers fundamental principles and techniques in deep and reinforcement learning, as well as convolutional neural networks, recurrent and recursive neural networks, back-propagation algorithms, regularization and optimization techniques for training such networks, dynamic programming, Monte Carlo, and temporal difference, and function approximation reinforcement learning algorithms, and applications of deep and reinforcement learning. The course also covers active research topics in deep and reinforcement learning areas.

CAP 5638. Pattern Recognition (3). Prerequisites: Knowledge of probability and at least one programming language. This course explores applications of mathematical tools, in particular, probabilistic, algebraic, and linguistic tools, to problems in pattern recognition and classification. Feature selection procedures, syntactic pattern recognition. Applications of fuzzy set theory to pattern recognition and classification.

CAP 5726. Introduction to Computer Graphics (3). Prerequisite: COP 4530. This course covers fundamental principles and algorithms underlying computer graphics, and also provides a brief introduction to OpenGL. The course is intended for computer-science graduate students who are interested in computer-graphics related careers or in learning and applying computer-graphics techniques.

CDA 5125. Parallel and Distributed Systems (3). Prerequisite: COP 4610. This course introduces various systems aspects of parallel and distributed computing. Topics include parallel computer architectures, interconnects, parallel programming paradigms, compilation techniques, runtime libraries, performance evaluation, performance monitoring and tuning, as well as tools for parallel and distributed computing.

CDA 5155. Computer Architecture (3). Prerequisite: CDA 3101. This course focuses on computer system components; microprocessor and minicomputer architecture; stack computers; parallel computers; overlap and pipeline processing; networks and protocols; performance evaluation; architecture studies of selected systems.

CEN 5035. Software Engineering (3). Prerequisites: CEN 4021, COP 4020, and COP 4531. This course surveys software engineering and a detailed study of topics from requirements analysis and specification, programming methodology, software testing and validation, performance and design evaluation, software project management, and programming tools and standards.

CEN 5526. Wireless and Mobile Computing (3). This course introduces students to the design, implementation, and analysis of mobile systems and applications in various domains, including urban sensing, mobile healthcare monitoring, security and privacy, location-aware services, and vehicular computing. Integral to the course are the course projects in which students develop mobile applications on mobile devices. Through the course projects, students gain hands-on experience on building mobile applications and validate their research ideas in practice.

CGS 5267. Principles of Computer Organization (3). (S/U grade only). Corequisites: COP 3330 and MAD 2104. This course is for graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Basic computer structure and design, register transfer and micro operations, central processor organization, microprogramming, arithmetic processor design, input-output, memory organization, virtual memory, microprocessors and microcomputer architecture.

CGS 5268. Principles of Computer Organization II (3). (S/U grade only). Prerequisite: CDA 3100 or CGS 5267. This course explores fundamental concepts in processor design, including data path and control, pipelining, memory hierarchies, and I/O.

CGS 5409. Object-Oriented Programming in C++ for Non-majors (2). Prerequisite: COP 3014 or a comparable course in C or C++ programming. Pre- or corequisite: COP 3353. In this course, topics include basics of C++ language, objects and classes, programming with classes, constructors and destructors, dynamic memory allocation, function and operator overloading, master classes, the class iostream, base and derived classes, and templates. May not be applied toward a degree in computer science.

CGS 5425. Object-Oriented Programming with Data Structures (3). (S/U grade only). Prerequisites: COP 3330 and MAD 2104. Pre- or corequisite: CDA 3100. This course is for graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Structured and object-oriented programming; invariant relations, stepwise refinement; text processing, internal sorting methods, linear tables, pointers and linked data structures, recursive programming and recursion elimination, sequential file processing; trees and graphs; program verification and running time analysis; application of concepts through programming projects.

CGS 5426. Programming Language Concepts (3). (S/U grade only). Corequisite: COP 4530. This course is for graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. A survey of programming languages and language features and an introduction to compilers. Languages to be discussed include FORTRAN, Pascal, Ada, PL/I, APL, and LISP. An oral presentation is required.

CGS 5427. Algorithm Design and Analysis (3). (S/U grade only). Prerequisites: COP 4530, MAD 3105, or MAD 3107. Corequisite: STA 4442, STA 4321 or STA 3032. This course is for graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Techniques for the analysis of computer algorithms; examples of well-designed algorithms and associated data structures; principles of algorithm design and application of programming projects.

CGS 5428. Relational Database Theory (3). (S/U grade only). Prerequisite: COP 3330 and MAD 2104. This course is for graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Basic file organization methods, indexed files, multi-key processing; architecture of database management systems; relational, hierarchical network, and semantic database models; normalization, distributed databases and file systems; practical use of a DBMS and the building of a database application.

CGS 5429. Introduction to Computer Theory (3). (S/U grade only). Prerequisite: MAD 3105. This course is for graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Regular expressions; regular, context-free, context-sensitive, and unrestricted grammars; foundations of language theory; finite automata and linear grammars; pushdown automata; Turing machines and non-solvability.

CGS 5466. Programming for Non-Majors (3). (S/U grade only). Prerequisite: MAC 1140. This course examines fundamental concepts and skills of programming in a high-level language. Flow of control topics such as sequence, selection, iteration, and subprograms are covered. Data structures topics such as arrays, strings, structs, and ADT lists and tables are also covered, along with algorithms using selection and iteration (decision making, finding maxima and minima, basic searching and sorting, simulation, etc). Good program design using a procedural paradigm, structure, and style are emphasized.

CGS 5765. Principles of Operating Systems (3). (S/U grade only). Prerequisites: CDA 3101 and COP 4530. This class is for graduate non-majors and graduate majors needing foundational work in computer science; credit may not be applied toward a graduate degree in computer science. Design principles of batch multi-programming and time-sharing operating systems. Linking, loading, input-output systems, interacting processes, storage management, process and resource control, file systems.

CGS 5935r. Special Topics in Computer Science for Non-Majors (1-3). (S/U grade only). Prerequisite: Instructor permission. This special-topics course is intended for non majors. Topics may vary. May be repeated within the same term, to a maximum of three semester hours.

CIS 5105. Computer Systems Performance Analysis (3). Prerequisite: COP 4610, MAD 3105, and STA 4442. This course covers empirical, simulation, and analytical methods to evaluate computer systems. The emphasis is on the empirical methods. Through the course project, the students gain experience measuring and evaluating a system using proper experimental design, metrics, workloads, and statistical analysis techniques.

CIS 5370. Computer Security (3). Prerequisites: COP 4610. In this course, topics include computer security threats and attacks, covert channels, trusted operating systems, access control, entity authentication, security policies, models of security, database security, administering security, physical security and TEMPEST, and brief introductions to network security and legal and ethical aspects of security. A research paper or project is required.

CIS 5371. Cryptography (3). Prerequisite: MAD 3105. This course addresses issues of modern cryptography covering theory and practice. Algorithms such as the RSA, ElGamal, and the Digital Signature Standard are covered in depth.

CIS 5627. Offensive Computer Security (3). Prerequisite: CDA 3100. This course covers fundamental problems, principles, and techniques in offensive computer security including various buffer overflow techniques, format string techniques, basic networking techniques, shellcode development, web application exploitation, software reverse engineering, fuzzing techniques, social engineering techniques, and then commonly used tools for penetration testing with an emphasis on their principles and fundamental techniques.

CIS 5900r. Directed Individual Study (1-9) (S/U grade only). May be repeated to a maximum of twenty-seven semester hours.

CIS 5910r. Supervised Research (1-5). (S/U grade only). This course cannot be applied to the master's degree. May be repeated to a maximum of five semester hours.

CIS 5915r. Graduate Software Project (1-12). (S/U grade only). A minimum of six semester hours of credit is required for project option MS students.

CIS 5920r. Colloquium (0-1). (S/U grade only). This course is for PhD CS students who will be required to attend a specified number of research colloquium offered by either faculty or students within the CS Department or visitors to the department. The main goal of this course is to help the PhD CS students fulfill in part the CS Department's scholarly engagement requirement. May be repeated to a maximum of ten semester hours.

CIS 5930r. Selected Topics in Computer Science (1-3). May be repeated to a maximum of twelve semester hours.

CIS 5935. Introductory Seminar on Research (2). (S/U grade only). Prerequisite: Admission to the MS or PhD in Computer Science degree program. This seminar is a series of lectures given by faculty on the research being conducted by the Department of Computer Science. Other lectures include guidelines on the preparation of the doctoral portfolio, and on the use of library research tools.

CIS 5940r. Supervised Teaching (1-5). (S/U grade only). May be repeated to a maximum of five semester hours.

CIS 5949r. Internship in Computer Science (0-9). (S/U grade only). Prerequisite: COP 4610. This internship is a field placement in an approved industry or government entity having a significant information technology or computer science component. May be taken for variable credit and repeated with departmental approval. Credits do not count towards graduation. Successful completion requires satisfactory job evaluation and demonstration of educational value of placement via a paper. May be repeated to a maximum of thirty-six semester hours.

CIS 5970r. Thesis (1-12). (S/U grade only). A minimum of nine semester hours of credit is required for thesis option MS students.

CIS 6628. Offensive Network Security (3). Prerequisites: CIS 4626 or CIS 5627. This course provides comprehensive coverage of fundamental problems, principles, techniques, and commonly used tools for offensive network security. The course also covers real world policy (legal) and implementation issues in network penetration testing.

CIS 6900r. Directed Individual Study (1-12). (S/U grade only). May be repeated to a maximum of twenty-four semester hours.

CIS 6930r. Advanced Topics in Computer Science (1-3). May be repeated to a maximum of twelve semester hours.

CIS 6935r. Advanced Seminar in Computer Science (1). This course is an advanced seminar in computer science. May be repeated, and duplicate registration allowed during the same term, for a total of twelve semester hours.

CIS 6980r. Dissertation (1-12). (S/U grade only).

CIS 8962r. Doctoral Qualifying Examination (0). (P/F grade only.) May be repeated twice at most.

CIS 8964. Preliminary Doctoral Examination (0). (P/F grade only.)

CIS 8966. Master's Comprehensive Examination (0). (P/F grade only.)

CIS 8974. Master's Project Defense (0). (P/F grade only.)

CIS 8976. Master's Thesis Defense (0). (P/F grade only.)

CIS 8985. Dissertation Defense (0). (P/F grade only.)

CNT 5412. Network Security, Active and Passive Defenses (3). Prerequisite: COP 4530. This course analyzes threats to computer networks, network vulnerabilities, techniques for strengthening passive defenses, tools for establishing an active network defense, and policies for enhancing forensic analysis of crimes and attacks on computer networks. Topics include private and public key cryptography, digital signatures, secret sharing, security protocols, formal methods for analyzing network security, electronic mail security, firewalls, intrusion detection, Internet privacy, and public key infrastructures. A research paper or project is required.

CNT 5415. Applied Computer and Network Security (3). In this course, students familiarize themselves with current and emerging threats to the security of computer systems and networks, including viruses, worms, and network intrusion; and with techniques for the prevention, detection, and recovery from such attacks, such as firewalls, intrusion detection systems, secure coding practices, and others. Attack and defense mechanisms are studied in a systematic way to develop students' practical and analytical skills to identify and correct or mitigate threats to computer systems and networks.

CNT 5505. Data and Computer Communications (3). Prerequisites: CDA 3101 and COP 4610. This course offers an overview of networks; data communication principles; data link layer; routing in packet switched networks; flow and congestion control; multiple access communication protocols; local area network protocols and standards; network interconnection; transport protocols; integrated services digital networks (narrowband and broadband); and switching techniques and fast packet switching

CNT 5529. Wireless Networking (3). This course is intended to cover a wide spectrum of topics on wireless networks, including the physical layer, the medium access control layer, and the network layer. The focus is on understanding, implementing, and experimenting with various wireless networking technologies in different layers with software.

CNT 5605. Computer and Network Administration (3). Prerequisite: COP 4610. This course covers UNIX user commands and shell programming. Also covered are problem solving and diagnostic methods, system startup and shutdown, device files and installing devices, disk drives and file systems, NFS, NIS, DNS, sendmail. Students also learn how to manage a WWW site, manage UNIX software applications, system security, and performance tuning. Legal and professional issues, ethics and policies are covered.

COP 5570. Concurrent, Parallel, and Distributed Programming (3). Prerequisite: COP 4610. This course covers UNIX and C standards, file I/O, file access and attributes, directories, the standard I/O library, systems administration files, the process environment, process control, process relationships, signals, terminal I/O, daemon processes, interprocess communication, and pseudo terminals.

COP 5611. Advanced Operating Systems (3). Prerequisites: CDA 3101, COP 4610, and introductory probability or statistics. This course focuses on design principles of batch, multiprogramming, and time-sharing systems; distributed systems; problems of concurrency.

COP 5621. Compiler Construction (3). Prerequisites: CDA 3101, COP 4020, and COT 4420. This course serves as an introduction to compiling, elements of language theory, syntax-directed translation, lexical analysis, symbol tables, LR(k) parsing, intermediate code generation, code optimization, code generation, error detection and recovery. There are a number of significant programming projects in this course.

COP 5641. Kernel and Device Driver Programming (3). Prerequisites: COP 4610 and COP 5570, or instructor permission. This course covers internals of the Linux operating system kernel, including virtual and physical memory management, scheduling, and device drivers. Focus is also placed on kernel modules, hardware interfaces, char and block devices, kernel debugging, interrupt handling, and memory mapping. Laboratory exercises include modifying example modules and project developing a new device driver.

COP 5659r. Mobile Programming (3). Prerequisite: COP 4530. This course teaches students how to program mobile devices. Students use event-based models to write and deploy an intent based application using a mobile computing software framework. May be repeated to a maximum of nine semester hours.

COP 5725. Database Systems (3). Prerequisites: COP 4610 and COP 4710. This course examines the use of a generalized database management system; characteristics of database systems; hierarchical, network, and relational models; file organizations.

COP 6622. Advanced Topics in Compilation (3). Prerequisite: COP 5621. This course covers attribute grammars and attribute grammar processors, formal methods of semantic analysis, generalized tree transformers, code selection, analysis and optimization, as well as error analysis and recovery.

COT 5310. Theory of Automata and Formal Languages (3). Prerequisites: COP 4020 and COT 4420. This course examines normal models of computation; automata; formal languages, their relationships, decidable and undecidable problems.

COT 5405. Advanced Algorithms (3). Prerequisite: COP 4531. This course covers algorithms, formal proofs of correctness, and time complexity analysis for network flow problems, approximation of NP hard combinatorial optimization problems, parallel algorithms, cache-aware algorithms, randomized algorithms, computational geometry, string algorithms, and other topics requiring advanced techniques for proof of correctness or time/space complexity analysis.

COT 5507. Analytic Methods in Computer Science (3). Prerequisite: COP 4531. This course teaches computer science students the fundamental discrete mathematics required for serious graduate work in algorithms and theoretical computer science. It specifically covers topics in recurrent problems, sums, integer functions, elementary number theory, binomial coefficients, special numbers, and generating functions.

COT 5715. Random Number Generation (3). Prerequisite: COP 4531. This course provides a graduate-level examination of all aspects of random number generation as used in simulation; specifically, the course concentrates on pseudorandom number generation and quasi-random number generation theory and practice.

ISC 5228. Monte Carlo Methods (3). Prerequisites: ISC 5305, MAC 2311, and MAC 2312. This course provides an introduction to probabilistic modeling and Monte Carlo methods (MCMs) suitable for graduate students in science, technology, and engineering. It provides an introduction to discrete event simulation, MCMs and their probabilistic foundations, and the application of MCMs to various fields. In particular, Markov chain MCMs are introduced, as are the application of MCMs to problems in linear algebra and the solution of partial differential equations.

COMPUTER THEORY:
see Computer Science

CONSUMER AFFAIRS:
see Family and Child Sciences

COUNSELING PSYCHOLOGY AND HUMAN SYSTEMS:
see Educational Psychology and Learning Systems

CREATIVE WRITING:
see English

Graduate Program in CORPORATE AND PUBLIC COMMUNICATION

COLLEGE OF APPLIED STUDIES

Web Page: <https://pc.fsu.edu/academics/graduate-programs/cpc/cpc-program>
Teaching Faculty III: Lindsay; **Teaching Faculty II:** Wallace; **Teaching Faculty I:** Parker

Master of Science (MS) Degree in Corporate and Public Communication

The College of Applied Studies offers a terminal master's degree for graduate students currently employed in or seeking professional positions emphasizing public affairs, public information, and public issues management within business, government, not-for-profit organizations, or educational institutions. By the conclusion of the master's program, students will be competent in select areas of organizational communication.

The goals of the CPC program include:

- Preparing students for professional careers within business, government, not-for-profit organizations, or educational institutions;
- Providing students with experience in making formal communication presentations;
- Helping students develop quantitative and qualitative skills in organizational communication contexts; and,
- Equipping students with basic knowledge of communication theories with particular emphasis on those that apply to corporate and public affairs, public information, and issue management.

The skills to be developed include:

- The ability to successfully plan and implement marketing, advertising, or public relations campaigns
- The ability to successfully resolve conflicts
- The ability to successfully manage individuals and crises
- The ability to find in any cases the available means of persuasion
- The ability to analyze the content of various messages
- The ability to perform computer-mediated, social scientific communication research

Admission Requirements

To be considered for admission, a student must attain a GPA of at least 3.0 on a 4.0 scale on all work attempted while registered as an upper division student working toward a baccalaureate degree or a combined verbal and quantitative score of at least 285 on the Graduate Record Examination (GRE). Students may be from a field closely allied to Communication. Such students, however, may need to complete extra coursework to make up deficiencies.

College Admission Requirements

Students must complete the University application for admission to a graduate program at Florida State University. Apply online at <https://admissions.fsu.edu/gradapp/>. Pay the application fee online. Provide one official transcript from all colleges attended. Provide official GRE scores. In addition, applicants must provide an applicant statement addressing the following questions:

- Why have you chosen to apply to this master's program?
- Describe your short- and long-term goals. Where do you see yourself professionally in five and in ten years?
- What experiences and competencies make you a strong candidate for this program (internships, work experience, computer literacy, awards)?

Students must also provide three letters of recommendation and a résumé or curriculum vitae.

For specific questions concerning this application process, contact Cristina Doan at cdoan@fsu.edu or (850) 770-2148.

Program Requirements

This program requires students take a minimum of thirty-three hours of coursework, twenty-seven of which must be letter-graded. It is possible to complete the program in two years if some coursework is completed during the summer sessions. Students must also take and pass a comprehensive examination. The program requires the following courses:

- Six hours of coursework in Theory and Principles;
- Six hours of coursework in Research and Methods;

- Nine hours of coursework in Applications; and
- Twelve additional hours of approved Communication and outside courses (no more than two classes outside of the Communication major may be taken).

Students who have completed insufficient coursework in Communication at the undergraduate level (for example, students who did not major in a communication-related area) may be required to take up to nine additional hours of letter graded undergraduate coursework as determined by their graduate advisors.

Note: These additional hours will not count toward completion of the thirty-three graduate-level semester hours.

Definition of Prefixes

ADV—Advertising

COM—Communication

MMC—Mass Media Communication

RTV—Radio: Television

SPC—Speech Communication

Graduate Courses

ADV 5503. Media Consumer Behavior (3). This course deals with the research and analysis of consumer behavior.

COM 5126. Organizational Communication Theory and Practice (3). This course provides an overview of the major organizational communication theorists and shows students how they can be used to diagnose and solve communication and performance problems.

COM 5127. Assessing Organizational Communication (3). This course introduces students to the methods of assessing organizational communication including survey, feedback methodology, assessment, and related issues in applied research.

COM 5316. Statistical Methods in Communication Research (3). This course examines statistical methodologies for communication research.

COM 5409. Kenneth Burke and Communication Theory (3). This course provides an introduction to the communication theory of Kenneth Burke and compares and contrasts that with other major rhetorical and communication theorists and shows students how the various theories can be applied to corporate and public communication situations.

COM 5469. Communication Planning and Dispute Resolution (3). Corequisite: COM 4465. This course introduces students to the theory and practice of alternative dispute resolution.

COM 5526. Marketing Communication Management (3). This course addresses the principles and procedures for communications planning for marketing and culminates in the development of an integrated marketing plan for e-business.

COM 5906r. Directed Individual Study (1–12). (S/U grade only). Prerequisite: School approval. In this course, students select a topic of interest to pursue under supervision of a faculty member that results in a final project, where the scope and type are defined by the student and faculty supervisor. This course may be repeated to a maximum of twelve semester hours. May be repeated within the same term.

COM 5911r. Supervised Research (1–5). (S/U grade only). Prerequisite: School approval. May be repeated to a maximum of five semester hours; duplicate registration allowed. A maximum of three hours may apply to the master's degree.

COM 5940r. Supervised Teaching (1–5). (S/U grade only). Prerequisite: School approval. May be repeated to a maximum of five semester hours; duplicate registration is not allowed. A maximum of three semester hours may apply to the master's degree.

COM 5946r. Communication Residency (1–6). (S/U grade only). This course provides work experience to apply and extend knowledge learned within the master's program.

COM 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

MMC 5600. Mass Communication Theory and Effects (3). This course is an analysis of historical and current theories of mass communication with an emphasis on media effects.

RTV 5423. New Communication Technology (3). This course surveys key issues related to new communication technologies within a variety of communication contexts. Specific topics vary as new technologies emerge.

SPC 5442. Group Dynamics and Leadership (3). This course is a review of important concepts and research in group processes and group leadership.

SPC 5545. Studies in Persuasion (3). This course involves lecture, readings, and discussion of human behavior theories as applied to persuasive communication.

SPC 6236. Contemporary Rhetorical Theory and Criticism (3). This course is an analysis of major theories of public communication and their application as critical tools.

SPC 6920r. Colloquium in Speech Communication (3). This course is a survey of issues of immediate interest and consequence to the area of speech communication. May be repeated to a maximum of nine semester hours; duplicate registration allowed.

CRIMINOLOGY AND CRIMINAL JUSTICE

Graduate Programs

COLLEGE OF CRIMINOLOGY AND CRIMINAL JUSTICE

Website: <http://www.criminology.fsu.edu/>

Professors: Beaver, Blomberg, Chiricos, Gertz, Hay, Mears, Siennick, Stewart, Warren; **Associate Professors:** Coonan, Stults; **Assistant Professors:** Castro, Chouhy, Close, Copp, DeVries, Friedel, Kim, Lantz, Piatkowska, Turanovic, Wenger, Zane; **Professors Emeriti:** Gertz, Kirkham, Kleck, Waldo

The College of Criminology and Criminal Justice offers graduate degree programs leading to the Master of Science (MS), Master of Arts (MA), and the Doctor of Philosophy (PhD) degrees. In addition to the general criminology degree programs, joint graduate pathways are offered with the School of Public Administration and Policy and with the College of Social Work.

For complete details of degree requirements, plus a description of the College of Criminology and Criminal Justice, its facilities, opportunities, and available financial assistance, refer to the "College of Criminology and Criminal Justice" chapter of this *Graduate Bulletin*.

Definition of Prefixes

CCJ—Criminology and Criminal Justice

CJE—Law Enforcement

CJJ—Juvenile Justice

CJL—Law and Process

Graduate Courses

CCJ 5016. Crimes of the Powerful (3). This course provides an in-depth examination of the many types of crimes committed by the powerful. Powerful people, corporations, and governments commit a variety of serious, deadly acts that if committed by "ordinary" or powerless people would be labeled and treated as criminal behavior.

CCJ 5028r. Seminar in Criminal Justice (3). This course investigates in detail some special problems of criminal justice policy and practice. May be repeated to a maximum of nine semester hours.

CCJ 5050. Proseminar in Criminology (3). This course provides an overview of various important issues in criminological theory and research and the administration of criminal justice.

CCJ 5078. Computer Applications in Criminal Justice (3). This course introduces the computer and the Internet. The course includes a discussion of the use of these technologies within the criminal justice system. It covers word processing, spreadsheets, databases, graphics, and Internet applications such as e-mail, chat, forum discussions, search engines, Web page browsers, etc.

CCJ 5109. Theory in Criminology and Criminal Justice (3). This course is an introduction to theory in criminology. It examines the principal functions of criminological theories and how they are rooted in the historical and social contexts in which they originate.

CCJ 5285. Survey of Criminal Justice Theory and Research (3). This course is an overview of the theoretical issues and research on the law and legal control of deviance in society.

CCJ 5320. Penology (3). This course is a survey of approaches to corrections, correctional institutions, their residents, programs and management, and special problems such as probation and parole, riots, outside contacts, and special institutions.

CCJ 5546. Prevention and Treatment of Crime and Delinquency (3). This course focuses on the theoretical development of crime prevention, punishment, and treatment. Topics include historical models of crime control, growth of crime prevention, and aspects such as environmental design, community action programs, and technology systems.

CCJ 5606. Survey of Criminological Theories (3). This course covers the major theories of criminal involvement, with attention to each theory's history, hypothesis, and empirical adequacy.

CCJ 5607. History of Criminological Thought (3). This course is an historical review of thought about crime and punishment with emphasis on the origin and evaluation of basic theories of crime-causation and community response as they arose in the nineteenth and early twentieth centuries.

CCJ 5625. Ecology of Crime (3). This course is an analysis of crime, delinquency, and victimization within various demographic and ecological systems of society. The course focuses on characteristics of offenders and offenses.

CCJ 5635. Biosocial Criminology (3). This course provides an overview of biosocial concepts, biosocial findings, and biosocial research designs. The course examines how genes, biology, the brains, and the environment relate to different types of antisocial behaviors.

CCJ 5636. Comparative Criminology and Criminal Justice (3). This course offers a comparative analysis of crime issues worldwide and reviews criminal justice system responses to both localized and transnational crime.

CCJ 5669. Race, Ethnicity, Crime and Social Justice (3). This course considers the relationships among race, ethnicity, and crime in the justice system. The effect of social policy on racial and ethnic inequality is studied, and theories of ethnic and racial justice are presented in terms of their effect on crime and criminal justice.

CCJ 5672. Gender, Crime and Justice (3). This course considers the impact of gendered relations on crime and justice. Theories of gender and society are presented and the special relationship between gender and crime is studied.

CCJ 5705. Research Methods in Criminology I (3). This course is a research design for criminological studies with an emphasis on data collection methods, measurement of validity and reliability, and causal analysis.

CCJ 5706. Applied Statistics in Criminology I (3). This course focuses on the use of statistical techniques in criminology.

CCJ 5707. Qualitative Methods in Criminology (3). This course is aimed at familiarizing students with the nature and utility of qualitative field work in various areas of criminological research.

CCJ 5709. Survey Research Methods in Criminology and Criminal Justice (3). Prerequisites: CCJ 5705 and CCJ 5706. This course is an introduction to the use of survey research in criminology and criminal justice.

CCJ 5740. Data Analysis in Criminology and Criminal Justice (3). This course covers at an intermediate level, data analysis problems in quasi-experimental designs and theory testing in criminology.

CCJ 5944. Supervised Teaching (3). (S/U grade only). This is a practicum with the student in teaching, guided by an experienced teacher with whom the student meets from time to time for discussion of readings and classroom experiences.

CCJ 5945. Field Practice in Criminology (9). (S/U grade only). Prerequisite: Successful completion of CCJ 5605, CCJ 5606, CCJ 5705, or CCJ 5706; or instructor permission.

CCJ 5946r. Criminal Justice Practicum (3-6). (S/U grade only). Prerequisites: CCJ 5078, CCJ 5285, CCJ 5606, CCJ 5704, and nine semester hours of electives. This variable credit course serves as a capstone experience for students who have completed the other requirements for the master's degree in criminology with a criminal justice studies major. The course culminates with a master's paper that consists of an in-depth analysis of a subject related to the application of criminology and criminal justice.

CCJ 5971r. Thesis (1-6). (S/U grade only). A minimum of six semester hours of credit must be earned.

CCJ 5974r. Area Paper in Criminology (1-6). (S/U grade only). Prerequisite: instructor permission. This course offers an analysis and evaluation of literature within a substantive area of criminology. May be repeated to a maximum of six semester hours.

CCJ 5981r. Directed Individual Study (3). (S/U grade only). This is a course with contents determined by the student in consultation with the instructor, with whom the student meets regularly for supervision of the study. May be repeated to a maximum of twelve semester hours.

CCJ 6065. Professional Development in Criminology (3). This course provides students with the key training needed to engage in the professional activities central to a successful scholarly career in criminology.

CCJ 6665. Victimology (3). Prerequisites: CCJ 5705 and CCJ 5706. This course introduces students to the field of victimology and explores its conceptual boundaries, basic concepts and literature within various subareas.

CCJ 6708. Seminar in Crime Research (3). This course encourages advanced students to approach the multifaceted problem of research as a set of interrelated issues ranging from tasks of concept formation and theory construction through research design and data collection to the assessment and analysis of the generated data.

CCJ 6741r. Advanced Data Analysis in Criminology and Criminal Justice (3). This course provides in-depth coverage of an advanced data analysis method used in criminological research. Topics include analyzing limited dependent variables, methods for analyzing longitudinal data, hierarchical linear models, structural equation models, models with latent variables, methods for constructing indices and scales. May be repeated to a maximum of twelve semester hours.

CCJ 6920r. Seminar in Theoretical Criminology (3). For this course, contents vary as instructors present different developments, problems, and controversies. May be repeated to a maximum of twelve (12) credit hours; repeatable within the same term.

CCJ 6980r. Dissertation (1-12). (S/U grade only).

CCJ 8968r. Preliminary Examination Preparation (1-12). (S/U grade only). This course prepares students for doctoral preliminary examinations. Consent of major professor required. May be repeated to a maximum of twelve semester hours.

CCJ 8969r. Preliminary Doctoral Examination (0). (P/F grade only.)

CCJ 8976r. Master's Thesis Defense (0). (P/F grade only.)

CCJ 8985r. Dissertation Defense (0). (P/F grade only.)

CJE 5024. Police and Society (3). This course is a social psychological examination of current issues and problems in municipal law enforcement, including such topics as the informal exercise of police authority, police role conflict, the relative significance of law enforcement and social service, and interactional dynamics of police subculture.

CJJ 5020. Juvenile Justice (3). This course considers the processing of offenders through the juvenile justice system. It investigates the special forms of justice applied to non-adults by arrest, detention, adjudication and juvenile corrections.

CJL 5520. Structure and Process of the American Court System (3). This course examines the development of a positive and normative framework for analyzing criminal courts and an introduction of students to the basics of planning tools with applications to the management of criminal courts.

School of DANCE Graduate Programs

COLLEGE OF FINE ARTS

Website: <http://dance.fsu.edu/>

Chair: Anjali Austin; **Associate Chair:** Russell Sandifer; **Professors:** Austin, Farrell, Glenn, Sandifer, Welsh, Zollar; **Associate Professors:** Atkins, Corbin, Garibaldi, Goldman; Schwadron, Uchizono, Welliver; **Assistant Professors:** Ishangi, Mitchell, Rhynard; **Assistant in Research:** Burdick; **Research Faculty I:** Peterson; **Instructional Specialist III:** Smith; **Instructional Specialist I:** Davis-Craig; **Emeriti:** Davis, Fichter, Houlihan, McCullough, Morgan, Phillips, Wagoner, Young.

The School of Dance offers graduate work leading to the Master of Fine Arts (MFA) degree in dance and the Master of Arts (MA) degree in dance with a major in American Dance Studies or Studio and Related Studies. The mission of the Florida State University School of Dance is to provide an environment conducive to the highest caliber of dance training, art making, and scholarship. Our approach encourages fluidity between the processes of making art, honing craft, and deepening intellectual explorations. We cultivate the individual creative voice with exposure to diverse technical and philosophical approaches. Such an environment nurtures exceptional dance practitioners, allows us to make creative and intellectual contributions to the larger dance community, and fosters collaborative endeavors within and beyond our field. Outstanding artists, teachers, and scholars serve on the dance faculty and are committed to the individual mentoring of each graduate student's course of study.

The emphasis of the Master of Fine Arts in dance includes choreography, performance, dance sciences, dance production design, and dance technology, complemented by required work in dance history and theory. The curriculum for each candidate culminates in a graduate thesis project designed by the student in consultation with a mentor. Elective work may include dance administration, community engagement, and/or more advanced studies in the core curriculum. The thesis reflects each student's focus in any one or a combination of these areas of study.

The emphasis of the Master of Arts in dance with a major in American Dance Studies is on the preparation of the historian or theorist. This program is based in research that investigates a wide range of dance practices, from the vernacular and religious to stage forms. Dance is examined within broad cultural contexts in order to understand the ways in which it both reflects and influences American identity. This major offers a scholarly focused option to complement the existing major in Studio and Related Studies, which offers a more practice-based emphasis of study. The major in American Dance Studies prepares the student, among other options, to continue study towards a PhD degree in Dance. The American Dance Studies major will also prepare students for careers or continued studies in diverse areas of the dance field that may include, but are not limited to: dramaturgy, dance administration, museum or dance archival studies, or arts library science.

The emphasis of the Master of Arts in dance with a major in Studio and Related Studies entails investigation into one or more of the diverse areas within the field of dance that extends studio practices beyond performance and choreography. This degree is ideal for the focused pre-professional or returning professional whose interest is in broadening their preparation for areas of the field that may include, but are not limited to: community engagement, dance sciences, dance production design, dance pedagogy, and dance technology.

Visiting artists, guest choreographers, and an outstanding dance lecture and film series are regular enhancements of the curriculum. Ongoing performance and repertory projects bring exceptional dance masterworks to campus for performance by the Florida State University dance majors, linking the artistic and technical development of dancers to their understanding of the cultural and historical context of the art. The Maggie Allesee National Center for Choreography (MANCC), a dance and choreographic research center affiliated with the School of Dance, also hosts numerous internationally recognized dance artists. The program's facilities include spacious studios and the **Nancy Smith Fichter Dance Theatre**.

Florida State University is an accredited institutional member of the National Association of Schools of Dance.

Requirements for a Master of Fine Arts (MFA) in Dance

The MFA degree candidates must have completed an undergraduate major in dance or have a significant experience in the field. Admission into the graduate dance program is determined on the basis of the candidates' auditions,

interviews, writing samples, and credentials. Each candidate must meet the University admission requirement of a minimum 3.0 grade point average on a 4.0 scale on all work attempted while registered as an upper-division student working toward a baccalaureate degree. The GRE is not required as the audition, interview, and writing samples provide alternate methods of assessing qualifications for admission.

The students' progress is informally assessed throughout the graduate program while formal assessments occur at the end of the first year of graduate study. A probationary period may be established if a student is having difficulty and needs special attention. The amount of work required, in addition to the minimum dance curricular requirements and the minimum University-wide requirements, depends upon the students' undergraduate preparation and level of achievement.

MFA students are expected to maintain continuous participation at the appropriate level in ballet and/or contemporary dance classes for graduation.

Summary of Minimum Requirements

The MFA degree in dance requires a minimum of sixty-six (66) semester hours, normally constituting a three-year course of study. This minimum must contain twelve semester hours of technique, three semester hours of seminar in dance research, twenty-five semester hours of specified theoretical and studio courses, six semester hours in a final creative thesis project, and twenty semester hours in electives. Expertise in any of the areas and/or proficiency in technique may allow individual candidates the option of designing a course of study that is tailored to the candidate's research, performance, or production interests. This will be done in consultation with the graduate faculty. Coursework in Musculo-Skeletal Anatomy is a prerequisite for the degree. Remedial work in Dance Kinesiology outside of the program map will be required if this condition has not been met by the start of the program.

1. **Dance Technique:** Twelve semester hours.
2. **Seminar:** Seminar in Dance Research, three semester hours: DAN 5191.
3. **Other Dance Courses:** Twenty-five semester hours to include: DAA 5618 Choreography, three semester hours; DAN 5158 Theory of Dance Performance and Directing, three semester hours; DAN 5190 Theory and Practice of Dance Technique, two semester hours; DAA 5648 Choreographic Project, two semester hours; DAN 5508 Visual Design for Choreography, three semester hours; dance history (with specific courses to be selected in consultation with advisor), three semester hours; DAE 5305 Science of Dance Training, three semester hours; DAN 5650 Music Praxes in Dance, two semester hours; DAN 5592 Screendance Composition, two semester hours; and DAN 5590 Studies in Dance Technology, two semester hours.
4. **Final Creative Project:** Six semester hours: DAN 5972 (creative thesis: graduate concert). Candidates must fulfill a prerequisite by performing or understudying in at least one choreographic or restaged work, produced by graduate faculty or commissioned guest artists, or by serving as a rehearsal assistant in a faculty or guest artist work, before producing his/her own creative thesis. Any exceptions to this prerequisite will be determined by the graduate advisor in consultation with the graduate faculty. Each creative thesis may reflect a range of choreographic work in combination with other areas of focus that the candidate may have pursued.
5. **Electives:** Twenty semester hours.
6. **Comprehensive Examination:** Zero semester hours: DAN 5960r. Students are required to successfully complete a comprehensive examination consisting of two phases, written and oral.

Total: Sixty-six semester hours.

MFA Returning Professional

The MFA Returning Professional track allows career dance artists to design a curriculum that will enhance and augment current skills, deepen existing knowledge, and provide opportunities for exploring new areas of interest. Acceptance is at the faculty's discretion and on a case-by-case basis. Students who are designated returning professionals by the faculty have some latitude in shaping their curriculum, with faculty approval. The following criteria are considerations for admittance into the returning professional track:

1. Substantial professional dance career at the national or international level;
2. Demonstrated choreographic and/or restaging experience with dance repertory;
3. Demonstrated maturity and commitment to the field of dance;
4. Ongoing engagement and currency in the field of dance.

MFA Returning Professional Timeline

Sixty (60) semester hours are required for the MFA in Dance. Returning Professionals can choose an accelerated 2-year track or a 3-year track.

MFA Returning Professional Accelerated 2-Year Track

For the accelerated 2-year Returning Professional Track, the candidate is granted flexibility to satisfy program requirements through a combination of Fall, Spring, and Summer semesters, which is tailored to the unique objectives of the individual student. The following is an example of how the accelerated 2-year track might be divided:

1. **Summer 1:** 0–3 credit hours
2. **Fall 1:** 12 credit hours
3. **Spring 1:** 12 credit hours
4. **Summer 2:** 3–9 credit hours
5. **Fall 2:** 12 credit hours
6. **Spring 2:** 12 credit hours
7. **Summer 3:** 3–9 credit hours

MFA Returning Professional 3-Year Track

The Returning Professional 3-year track is three Fall and three Spring semesters. The following is an example of how this track might be divided:

1. **Fall 1:** 9 credit hours
2. **Spring 1:** 9 credit hours
3. **Fall 2:** 9–12 credit hours
4. **Spring 2:** 9–12 credit hours
5. **Fall 3:** 9–12 credit hours
6. **Spring 3:** 9–12 credit hours

Requirements for a Master of Arts (MA) in Dance with a Major in American Dance Studies

The MA degree candidate with a major in American Dance Studies should have an extensive background in dance and an undergraduate degree in an appropriate area of study, such as (but not limited to) Fine or Performing Arts, History, American Studies, Cultural Studies, Anthropology, or Humanities. At least a 3.0 undergraduate grade point average or an appropriate score on the verbal and quantitative portions of the Graduate Record Examination is required for admission. Admission into the degree program will be determined on the basis of these University-wide requirements, three required letters of recommendation, and the applicant's required essay.

The students' progress is informally assessed throughout the graduate program while formal assessment occurs at the end of the first year of graduate study. A probationary period may be established if a student is having difficulty and needs special attention.

Summary of Minimum Requirements

The MA in dance with a major in American Dance Studies offers two tracks: a thesis option and a course intensive, non-thesis option. Either track normally constitutes a two-year course of study. Additionally, both tracks require students to incorporate some movement experience in his or her degree program. The kind and scope of practical work will vary among students, depending on his or her professional and educational background, and the individual program of study will be developed with the adviser. The student must also complete the University-wide requirement regarding foreign language proficiency. This requirement may be met by one of the following: 1) Achieving a satisfactory performance on the Graduate School Foreign Language Test; 2) Labanotation or Laban Analysis (Effort Shape) coursework with a 3.0 (B) average; 3) Completion of twelve semester hours of college level foreign language; 4) Four years of a single language at the high school level. Credit for foreign language courses may not be counted toward elective requirements.

Thesis Option:

The thesis track for the MA in dance with a major in American Dance Studies requires a minimum of thirty-six semester hours of graduate-level course requirements. This minimum must contain twenty-four semester hours of required courses, including three semester hours of a seminar in dance research, nine semester hours in American dance history, three semester hours in dance theory, three semester hours in special topics in dance, and six semester hours of thesis work. Additionally, the student must earn twelve semester hours of elective courses, either in dance studies or in an area that complements the student's individual research trajectory (e.g. in American and Florida Studies, History, African American Studies, Women's Studies, Humanities, Music, Theatre, or Art History).

1. **Seminar:** Seminar in Dance Research, Three semester hours: DAN 5191.
 2. **Dance History:** Dance in the Global Gulf, Dance Migration and Mobilities, Contemporary Stage and Social Movements, New York City: Arts and Resources, three semester hours each. Students select from among these course offerings to total nine semester hours: DAN 5147, DAN 5148, DAN 5149, and DAN 5950r.
 3. **Theory of Dance:** Three semester hours: DAN 5128.
 4. **Special Topics in Dance:** Three semester hours: DAN 5930.
 5. **Master's Thesis in Dance History:** Six semester hours: DAN 5973.
 6. **Master's Thesis Defense:** Zero semester hours: DAN 8976.
 7. **Electives:** Twelve semester hours.
- Total:** Thirty-six semester hours.

Course Intensive, Non-Thesis Option:

The MA in American Dance Studies requires a minimum of thirty-nine semester hours of graduate-level course requirements. This minimum must contain eighteen semester hours of required courses, including three semester hours of a seminar in dance research, nine semester hours in American dance history, three semester hours in dance theory, and three semester hours in special topics in dance. Additionally, the student must earn twenty-one semester hours of elective courses, either in dance studies or in an area that complements the student's individual research trajectory (e.g. in American and Florida studies, History, African American Studies, Women's Studies, Humanities, Music, Theatre, or Art History).

1. **Seminar:** Seminar in Dance Research, Three semester hours: DAN 5191.
2. **Dance History:** Dance in the Global Gulf, Dance Migration and Mobilities, Contemporary Stage and Social Movements, New York City: Arts and Resources, three semester hours each. Students select from among these course offerings to total nine semester hours: DAN 5147, DAN 5148, DAN 5149, and DAN 5950r.
3. **Theory of Dance:** Three semester hours: DAN 5128.
4. **Special Topics in Dance:** Three semester hours: DAN 5930.
5. **Electives:** Twenty-one semester hours.
6. **Comprehensive Examination:** zero semester hours: DAN 5960r. Students are required to successfully complete a comprehensive examination consisting of two phases, written and oral.

Total: Thirty-nine semester hours.

Requirements for a Master of Arts (MA) in Dance with a Major in Studio and Related Studies

The MA degree candidate with a major in studio and related studies must have completed an undergraduate major in dance or must demonstrate an equivalent level of achievement. Admission into the graduate dance program is determined on the basis of the candidate's audition, interview, writing samples, and credentials. Each candidate must meet the University admission requirements of a minimum 3.0 grade point average on a 4.0 scale on all work attempted while registered as an upper-division student working toward a baccalaureate degree. The GRE is not required as the audition, interview, and writing samples provide alternate methods of assessing qualifications for admission.

The students' progress is informally assessed throughout the graduate program while formal assessment occurs at the end of the first year of graduate study. A probationary period may be established if a student is having difficulty and needs special attention. Students who cannot meet School and academic standards will be discontinued from the program. The amount of work required, in addition to the minimum dance curricular requirements and the minimum University-wide requirements, depends upon the students' undergraduate preparation and level of achievement.

Summary of Minimum Requirements

The MA in dance with a major in studio and related studies requires a minimum of thirty-six semester hours of graduate level course requirements, normally constituting a two-year course of study. This minimum must contain eight semester hours of technique, three semester hours of seminar in research, five semester hours of choreography and choreographic projects, three credit hours of directed individual study (capstone experience), and seventeen semester hours of elective courses in studio-related courses. Elective courses must be approved by the students' advisor. Students are required to investigate possibilities for electives that relate to their areas of interest, deepen their understanding of dance studio studies, and provide a significant investigation into one or more related areas of study that will impact their particular contri-

bution to the field of dance upon graduation. Individual programs are planned by students with their faculty advisor. Students must develop an appropriate capstone experience that substantively synthesizes their unique curricular experience. The capstone project must meet the approval of the graduate advisor and the graduate faculty mentoring the candidates' individual programs.

1. **Dance Technique:** Eight semester hours.
 2. **Seminar:** Seminar in Dance Research, three semester hours: DAN 5191.
 3. **Other Dance Courses:** Five semester hours in choreography to include: DAA 5618 Choreography and DAA 5648 Choreographic Project.
 4. **Final Capstone Project:** Three semester hours: DAN 5905 Directed Individual Study (capstone project). Each capstone project may reflect the individual areas of focus that the candidate pursued.
 5. **Electives:** Seventeen semester hours.
- Total:** Thirty-six semester hours.

Graduate Apprenticeship/Assistantship Program

Completion of the graduate apprenticeship/assistantship program is required to be eligible for a teaching assistantship. In special cases, this requirement may be modified or waived if there is sufficient knowledge of candidate's teaching ability.

Definition of Prefixes

- DAA**—Dance, Emphasis on Activity
DAE—Dance Education
DAN—Dance

Graduate Courses

DAA 5118r. Contemporary Dance (1–3). Prerequisite: Faculty placement or instructor permission. May be repeated to a maximum of eighteen semester hours.

DAA 5218r. Ballet (1–3). Prerequisite: Faculty placement or instructor permission. May be repeated to a maximum of eighteen semester hours.

DAA 5228r. Graduate Pointe Technique and Repertory (1). Prerequisite: Instructor Permission. This course offers instruction in the theory and practice of ballet and pointe technique. Students build the strength and technique necessary to execute classical and contemporary pointe variations, with a focus on artistry, individual interpretation, style, and musicality. Graduate students are expected to approach the class and variations from a pedagogical and analytical point of view and present a lecture on the historical context of one of the variations to the rest of the class. May be repeated to a maximum of eight semester hours.

DAA 5618. Choreography (3). This course is the study of aesthetic issues in choreographic process; development and critical analysis of choreographic etudes; delineation of prospectus for extended choreography.

DAA 5647. Choreographic Process (2). This studio course is the first in a series of graduate level courses in choreography. The course provides a supportive environment in which students explore the creative process to define and refine their unique creative voice and vision. Guided by critical inquiry, the course is dedicated to exploring choreographic practice, method, and process through a variety of creative strategies including readings, assignments, and lab time.

DAA 5648r. Choreographic Project (2–6). (S/U grade only). This course focuses on the conception, development, and production of an extended choreographic work. May be repeated to a maximum of ten semester hours.

DAA 5688r. Dance Ensemble (1). (S/U grade only). This course provides experience in dance ensemble and performance work. Official casting and faculty approval required. May be repeated to a maximum of three semester hours.

DAA 5698r. Dance Performance (1–2). This course examines the preparation and public performance of selected roles in the repertory of dance theatre and/or dance studio theatre. Official casting and faculty approval required. May be repeated to a maximum of ten semester hours.

DAE 5305. Science of Dance Training (3). Prerequisite: DAN 3714 or equivalent. This course applies the movement sciences to the challenges of training dancers.

DAE 5387. Dance History Pedagogy (3). This course introduces students to basic skills necessary to teach dance history and dance appreciation at the undergraduate level.

DAE 5940. Supervised Teaching (2). (S/U grade only). A maximum of two hours may apply to a master's degree.

DAN 5126r. Current Issues in Dance History, Theory, and Research (1–3). This course introduces students to current state-of-the-art trends in dance history, theory and research methodology. As the field of dance scholarship is currently undergoing dramatic, paradigm-shifting changes, the content of the course changes each semester to include the most current information. May be repeated to a maximum of nine semester hours.

DAN 5127C. MANCC Experience (3). This course explores the Maggie Allesee National Center for Choreography (MANCC) experience with focus on ideas surrounding dance collaborations and process-oriented work, especially through a contextualization of and interaction with visiting MANCC artists and their current projects. This course engages students in considering the material in terms of their own artistic identity. Students learn more about MANCC programs and engage with dance history and issues pertinent to the current state of the dance field.

DAN 5128. Theory of Dance (3). This course focuses on the study of theoretical approaches to dance as evidenced by the work of influential scholars in the field of dance theory.

DAN 5147. Dance Practices of the Global Gulf (3). This course examines social, religious, and concert dance practices in the Gulf South and surrounding areas, including Mexico and Cuba, from a global perspective, tracing the inter-textual, cultural forces that shape American identities (broadly defined) with attention to questions grounded in diasporic, transatlantic, and transnational issues. A maximum of three semester hours may apply toward the master's degree.

DAN 5148. Dance Migrations and Mobilities (3). This course examines social, religious, and concert dance practices in the Americas, tracing the inter-textual, cultural forces that shape American (broadly defined) identities with special attention to questions surrounding issues of migration and mobility. A maximum of three semester hours may apply toward the master's degree.

DAN 5149. Contemporary Stage and Social Movements (3). This course looks at a range of dance forms that flourished in the United States in the second half of the 20th Century and through to the present day, seeking novel connections between street, social, and concert dance forms and their entanglements in public discourse. A maximum of three semester hours may apply toward the master's degree.

DAN 5158. Theory of Dance Performance and Directing (3). Recommended prerequisite: Previous technical experience. This course is a study of historical development and theoretical bases of performance and directing.

DAN 5190. Theory and Practice in Dance Technique (2). This course focuses on the study and studio exploration of principles of selected dance technique systems, with specific reference to their historic, kinesthetic, and aesthetic parameters.

DAN 5191r. Seminar in Dance Research (3-6). This course focuses on the development of advanced research skills in the area of dance history. Dance majors only. May be repeated to a maximum of six semester hours.

DAN 5193. History of African American Social Dance of the Twentieth Century (3). This course traces the major African-American social dance styles of the twentieth century. These dance styles are examined in a context that facilitates understanding their relationship to the culture(s) and events that produced and influenced them.

DAN 5194. Dancing in the Movies (3). This course traces the evolution of dance in the American popular film industry. Emphasis is placed on how movies encapsulate popular stereotypes and icons, revealing the roles of gender, race, fashion, economic and political forces.

DAN 5486. Documentation Techniques (3). Prerequisite: DAN 4418. This course combines hands-on experience with reading, discussion, and critique to develop technical skills and aesthetic awareness related to the documentation of concert dance. The course requires a significant research paper on current practices in dance documentation and a directing project for a dance concert documentation.

DAN 5507. Production and Stage Management for Dance (3). This course introduces students to the foundations of stage and production management for dance. Students cover basic coursework in resource and project management, as well as theoretical and practical experience in stage management.

DAN 5508. Visual Design for Choreography (3). This course is a critical analysis of the relationship between visual design and dance choreography. Study of current status of theatre design and technology.

DAN 5590. Studies in Dance Technology (2). This course addresses current issues in dance technology. Students develop fundamentals in media technologies while broadening their appreciation for technology in dance. This course facilitates the students' ability to expand creative expression, as well as enhance their ability to promote themselves as artists. Guest speakers offer exposure to technology applications in a number of related arts areas. Course topics are supported by video viewings, related readings, critiques, and group discussions. Value is placed on developing one's ability to speak and write about the creative process utilizing technology, as well as planning and executing technology-enhanced projects.

DAN 5591r. Dance and Video (2). Prerequisite: DAN 5590. This course includes the study of camera techniques for the screen and projection design for stage. The course is conducted in two units. The first unit explores concert dance documentation and videodance production. The second unit explores visual media design for the theater. The units may be taken concurrently in the same semester or sequentially for two credits each to a maximum of eight credit hours.

DAN 5592. Screendance Composition (2). This course combines theoretical inquiry and practical application to establish a working knowledge for creating art within the genre, screendance. Dance-specific concepts are reinforced as choreographic principles are transposed from stage to screen. The course follows the chronological progression of production from conception to dissemination, while addressing artistry in the creative process using industry-standard equipment and software.

DAN 5596. Photography for Dance (2). This course addresses the representation of dance and dancers in two dimensional non-time based photographic media. It involves hands-on camera work, post-production editing, and critical analysis of past or current photography.

DAN 5650. Music Praxes in Dance (2). This course examines a diverse range of histories and fundamentals of music through the lens of past and current dance practices while also exploring music-dance collaborations. Students develop skills in communicating with musicians as well as creating and editing sound scores.

DAN 5748. Targeted Cross-Training for Dancers (1-2). Prerequisites: Dance major status and instructor permission. This course provides a structure to help dancers (re) build the capacities they need to participate fully in dance technique classes, rehearsals, and performances following injury.

DAN 5765. Gyrotonic Methodology (3). This course introduces students to the GYROTONIC® specialized exercise system. The course demonstrates how Gyrotonic offers enhanced freedom of movement with exercises executed on the professional Pulley Tower machine. Students learn how this approach systematically works joints and muscles while stimulating the body's internal organs with corresponding breathing patterns.

DAN 5905r. Directed Individual Study (1-3). The Directed Individual Study provides students with an opportunity to investigate an area of interest in the field of dance. This self-initiated journey into research and/or creative activity begins with a proposal provided by the student. The faculty mentor acts as advisor providing consultation as needed. May be repeated to a maximum of twelve (12) credit hours; repeatable within the same semester.

DAN 5910. Supervised Research (2). (S/U grade only). A maximum of two hours may apply to a master's degree.

DAN 5930r. Special Topics in Dance (1-3). Prerequisite: Variable, depending on topic. Topics may vary from term to term.

DAN 5940r. Dance Internship (1-12). This course consists of a supervised internship to provide students with professional experience in their field. Design of the internship is developed by the student and intern host in consultation with the academic advisor. May be repeated to a maximum of twelve semester hours.

DAN 5950r. New York City: Arts and Resources (3). This course investigates, experientially and academically, New York City's resources. Using performances and exhibitions as the center point, the relationships among the various elements that compose an urban art event are explored. May be repeated within the same semester. May be repeated to a maximum of six semester hours.

DAN 5960r. Master's Comprehensive Examination (0). (P/F grade only.)

DAN 5971r. MA Capstone (3). This course facilitates MA students' progress in their final semester as they work toward completing a culminating capstone project as outlined in their research proposals defended the previous semester. Students work closely with the Committee Chair to fulfill independent research objectives. Capstone projects in both MA American Dance Studies and Studio and Related Studies may entail a wide variety of creative and scholarly activities tailored toward student interests, but they must include a public sharing of the project, a reflection and synthesis paper, and a defense of the research findings in a final meeting with the committee.

DAN 5972r. Creative Thesis (2-6). (S/U grade only). This course is for MFA degree candidates in dance only and oversees the research, development, and production of the graduate thesis project. A minimum of six semester hours is required.

DAN 5973r. Master's Thesis in American Dance Studies (1-6). This is an individualized course of study leading to completion of a formal master's thesis in American dance history. May be repeated within the same term to a maximum of six semester hours. May be repeated during the same semester.

DAN 8976. Master's Thesis Defense (0). (P/F grade only.) Prerequisite: DAN 5973. Thesis topic to be arranged with advisor.

Center for DEMOGRAPHY AND POPULATION HEALTH Graduate Programs

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <http://popcenter.fsu.edu>

Director: Carl Schmertmann (Economics); **Professors:** Brewster, Burdette, Carlson, J. Taylor, M. Taylor, Tillman (Sociology), Schmertmann (Economics); **Associate Professors:** Davis, Sanyal (Sociology); **Assistant Professors:** Felkner (Urban and Regional Planning), Hauer, McFarland, Waggoner (Sociology); **Professors Emeriti:** Eberstein, Nam, Sly

The Center for Demography and Population Health comprises faculty and graduate students whose research concerns demographic processes and health disparities. Center members represent the disciplinary perspectives of sociologists, planners, economists, geographers, and other social scientists, as well as behavioral, public health, and medical scientists. The Center's research and training programs are supported by grants and contracts from private and public entities concerned with the health and well-being of human populations. The Center offers a master's degree in demography and, in association with the Department of Urban and Regional Planning, a joint graduate pathway for both a planning and a demography master's degree. The Center also cooperates in the graduate programs of departments in the College of Social Sciences and Public Policy, wherein candidates for doctoral degrees may elect demography as an area of concentration. Graduate students and faculty in other colleges and schools within the University are also welcome to participate in the Center's research and training activities.

Center faculty members maintain active research programs and serve as consultants to national and international agencies and as officers or directors of professional organizations in demography and allied fields. As part of the Center's training mission, faculty members often invite students to participate in research projects. Students affiliated with the Center have access to workspace equipped with desktop computers and statistical software, and to the Center's data and document archives. Each Fall, the **Serow Scholarship** and the **Nam Scholarship** are awarded to two students to help cover tuition in the Master of Science in Demography program. Each Spring, the Center awards the **William J. Serow Prize** to an outstanding student in the degree program.

Combined BA/BS and MS-Demography Pathway

Qualified students in any undergraduate major may count up to twelve graduate-level credit hours toward both their bachelor's and a master's in Demography. Students in a combined bachelor's/master's pathway have the advantage of being able to apply undergraduate tuition assistance (e.g., Bright Futures, Florida Pre-Paid) to graduate courses and to explore graduate coursework as an undergraduate student, easing the transition to graduate school. Students accepted into the master's degree program who have completed the twelve credit hours of required coursework as undergraduates may finish the degree with just fifteen hours of additional coursework and satisfactory completion of a six-credit hour Master's Research Paper.

Candidates must have: ninety credit hours of completed coursework (Honors Program students need just sixty credit hours; transfer students must have completed at least twenty-four credit hours at FSU) and an earned grade point average (GPA) of 3.5 or higher *or* a GPA of 3.0 *and* scores of at least 152 on the Verbal Reasoning and Quantitative Reasoning sections of the Graduate Record Exam (GRE). Students must have completed SYA 4400 *or* STA 2122 with a grade of "B" or higher and completed SYD 3020 *or* ECP 3113 with a grade of "B" or higher. Interested students should meet with an advisor in the College of Social Sciences and Public Policy to determine their eligibility for graduate coursework as an undergraduate.

MS-Demography Degree Program (MSD)

The Center offers a program of study leading to the Master of Science (MS) degree in demography. This program has been designed for students who wish to specialize in population studies and to develop proficiency in the use of demographic data, methods, and theory. Emphasis is placed on the development and refinement of intellectual and technical skills useful in an applied research setting. Students entering the program should have career objectives that direct them toward mid-level research-oriented positions in the public or private sectors. The program includes a required twenty-four semester hour core in demography and research methods/statistics, three hours of elective courses approved by the director, and participation in the non-credit Professional Development Seminar for Demographers. In addition, each student must complete a master's research paper (three to six semester hours) in order to receive the master's degree. A minimum of thirty semester hours is required to earn the MS degree in demography.

A candidate for the program will be admitted by meeting the University general requirements for graduate studies and, upon review by the faculty admissions committee, by the consent of the director of the Center. Candidates wishing to pursue an academic career that normally requires a doctorate have the option of seeking admission to the graduate program of one of the departments (sociology, economics, urban and regional planning, geography, or political science) that offers a doctoral concentration in demography/population studies.

Courses

Description of individual courses can be found in this *Graduate Bulletin* under the departmental listings.

Required Core

Twenty-four semester hours:

1. Three semester hours of ECP 5118 (Population Data) or SYD 5133 (Population Data);
2. Three semester hours of ECP 5117 (Mathematical Demography) or SYD 5135 (Techniques of Population Analysis);
3. Three semester hours of GIS 5101 (Geographic Information Systems) or URP 5272 (Urban and Regional Information Systems);
4. Three semester hours of URP 5261 (Forecasting for Plan Development);
5. Three semester hours of SYD 5045 (Introduction to Demography)
6. Three semester hours of ECP 5115 (Seminar in the Economics of Population), SYD 5046 (International Population Dynamics), SYD 5215 (Health and Survival), SYD 5225 (Fertility), SYD 5105 (Population Theory), SYA 6933 (Aging and the Life Course), or SYO 5177 (Changing Families);
7. Three semester hours of SYA 5305 (Introduction to Research Methods), SYA 5458 (Social Statistics and Data Analysis for Public Health), or URP 5211 (Planning Statistics);
8. Three semester hours of SYA 5406 (Multivariate Analysis) or URP 5201 (Planning Research Methods).

List of Graduate-Level Courses for Demographers

DEM 5930r	Special Topics in Demography (3)
DEM 5935	Professional Development Seminar for Demographers (0) (S/U grade only).
DEM 5972r	Master's Research Paper in Demography (3–6) (S/U grade only).
ECP 5115	Seminar in the Economics of Population (3)
ECP 5117	Mathematical Demography (3)
ECP 5118	Population Data (3)
EDF 5401	General Linear Model Applications (3)
GEO 5472	Political Geography (3)
GEO 5545	Advanced Economic Geography (3)
GEO 5934r	Seminar in Current Topics (1–3)
GIS 5101	Geographic Information Systems (3)
GIS 5106	Advanced Geographic Information Systems (3)
STA 5066	Data Management and Analysis with SAS (3)
SYA 5305	Introduction to Research Methods (3)
SYA 5406	Multivariate Analysis (3)
SYA 5407	Advanced Quantitative Methods (3)
SYA 6933r	Selected Topics in Sociology (3)
SYD 5045	Introduction to Demography (3)
SYD 5046	International Population Dynamics (3)
SYD 5105	Population Theory (3)
SYD 5133	Population Data (3)
SYD 5135	Techniques of Population Analysis (3)
SYD 5136	Life Course Epidemiology (3)
SYD 5215	Health and Survival (3)
SYD 5225	Fertility (3)
SYO 5177	Family Demography (3)
SYO 6407	Race, Ethnicity, and Health (3)
URP 5201	Planning Research Methods (3)
URP 5211	Planning Statistics (3)
URP 5261	Forecasting for Plan Development (3)
URP 5272	Urban and Regional Information Systems (3)

- URP 5526 Healthy Cities, Healthy Communities (3)
 URP 5544 Gender and Development (3)
 URP 5610 Introduction to Development Planning

DEMOGRAPHY AND AREA STUDIES:
 see also Teacher Education; Economics

**POLITICAL SCIENCE; SOCIOLOGY DEVELOPING AREAS,
 PLANNING FOR:**
 see Urban and Regional Planning

DEVELOPMENTAL PSYCHOLOGY:
 see Psychology

DIETETICS:
 see Nutrition, Food, and Exercise Sciences

EARTH, OCEAN, AND ATMOSPHERIC SCIENCE Graduate Programs

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.eoas.fsu.edu/>

Chair: Vincent Salters; **Professors:** Bourassa, Cai, Chanton, Chassignet, Clarke, Dewar, Fuelberg, Hart, Huettel, Humayun, Landing, Liu, MacDonald, Misra, Nicholson, Odom, Ray, Salters, Speer, Tull, Wang, Ye; **Associate Professors:** Ahlquist, Baco-Taylor, Kish, Knapp, Mason, Mookherjee, Parker, Spencer, Stukel, Sura, Wu; **Assistant Professors:** Atwood, Chagnon, Fan, Fuentes, Holmes, Kranz, Owens, Parfitt, Wing, Young; **Professors Emeriti:** Barcilon, Burnett, Ellingson, Gleeson, Hsueh, Krishnamurti, LaSeur, Long, Loper, Nof, O'Brien, Pfeffer, Staley, Stern, Sturges, Thistle, Weatherly, Winchester

Earth, Ocean, and Atmospheric Science

In 2010, the departments of Geological Sciences, Oceanography, and Meteorology merged to form the Department of Earth, Ocean, and Atmospheric Science (EOAS). While retaining their respective programmatic focus, the geology, oceanography, and meteorology faculty offer a new level of interdisciplinary integration. This creates fresh opportunities for undergraduate and graduate education in the geosciences. The department provides students with an opportunity for holistic study of Earth's physical environment in preparation for professional careers in government, private, and academic sectors. Due to concerns about climate change, environmental sustainability, availability of natural resources, and environmental pollution and degradation, the U.S. Bureau of Labor Statistics projects an overall 14% increase in geoscience-related occupations between 2016 and 2026, which is 7% faster than the growth rate for all U.S. occupations. Earth, Ocean, and Atmospheric Science offers graduate degrees in aquatic science, geology, oceanography, and meteorology. The opportunities for study and the degree requirements are described below.

GEOLOGY

Earth, Ocean, and Atmospheric Science offers post-baccalaureate studies leading to both the Master of Science (MS) and the Doctor of Philosophy (PhD) degrees in geology through a wide variety of specialties. The doctoral degree program is intended to develop independent research abilities for those students who have the talent and motivation for original and creative work.

The FSU Geology program was formed in 1949. The Geology PhD program was initiated in the early 1960s. Faculty interests encompass many specialties, including geochemistry, micropaleontology, marine geology, hydrogeology, sedimentology and coastal processes, structure and tectonics, geochronology, petrology, and environmental geology.

Geology majors, as well as students from other disciplines with a strong background in natural sciences, may enter the program. Research programs may be conducted within the program, or they may involve collaborative work with members of the departments of Physics and Chemistry, the College of Engineering, the Geophysical Fluid Dynamics Institute, the Department of Scientific Computing, and the National High Magnetic Field Laboratory. Within EOAS, Geology conducts cooperative programs with the Florida Geological Survey, Northwest Florida Water Management District, Florida Department of Environmental Protection, and the United States Geological Survey.

The department's main geochemistry laboratories are at the National High Magnetic Field Laboratory. Instrumentation available for research includes inductively coupled plasma mass spectrometers, thermal ionization mass spectrometers, light isotope mass spectrometer, electron spin resonance spectrometer, atomic absorption and UV-VIS spectrometers, gravimeter and magnetometer, recirculating sediment transport flume, automated settling tube, electrozone particle counter, computerized image capture and analysis system, and facilities for hydrologic studies of surface and ground waters (saturated and unsaturated). A number of research microscopes, image analysis system, GIS laboratory, and field vehicles, as well as geochemical sample and thin-section preparation equipment, also support the program.

In addition to holding faculty positions at major universities around the world, graduates of the program have outstanding records in government and industry. In Florida, large numbers of graduates are employed by the Water Management Districts of the state, the Department of Environmental Protection, the Florida Geological Survey, the phosphate and clay mining industry, and numerous geologic and engineering consulting companies. Outside the state, a large number of graduates hold scientific and executive positions with major petroleum, mining, and high-tech industries. Other geology graduates hold civil service positions with the United States Nuclear Regulatory

Commission, National Aeronautics and Space Administration, United States Geological Survey, Soil Conservation Districts, Army Corps of Engineers, and state geological surveys.

Fellowships, as well as teaching and research assistantships, are available to highly qualified students. This financial support is awarded on a competitive basis. In addition, numerous geologically related part-time jobs, with both governmental and private agencies, are available in Tallahassee. Graduate students who require some type of financial assistance can normally find it.

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*. The following requirements for the MS and PhD degrees are spelled out in greater detail in the *Geological Sciences Graduate Handbook*.

Admission Requirements

Admission to the graduate program requires an undergraduate grade point average (GPA) of 3.0, and GRE General Test scores above the 50th percentile (for both the verbal and quantitative portions of the exam) are recommended. International students whose native language is not English are also required to achieve a score of 80 or better on the Educational Testing Service's Test of English as a Foreign Language (TOEFL) and to take (and report scores to this department) the Test for Spoken English (TSE).

A beginning graduate student should normally have preparation equivalent to that required for a baccalaureate degree, preferably in the natural sciences.

Master of Science (MS) Degree Program

Earth, Ocean, and Atmospheric Science offers only the thesis-type program for the master's degree in geology.

Coursework appropriate to the needs of the individual student should be arranged with the graduate student advisor or with the major professor and the supervisory committee. One semester per year of seminar (GLY 5931r) is required. For details, consult the *Geological Sciences Graduate Handbook*.

A thesis advisor and supervisory committee should be selected and a program of study approved no later than the end of the first semester of the student's graduate program. Students must present to the supervisory committee and publicly defend a description of proposed thesis research (prospectus). During the term that this is scheduled the student must enroll for GLY 8966r, Master's Comprehensive Examination.

Doctor of Philosophy (PhD) Degree Program

The Doctor of Philosophy degree is based on satisfactory completion of required coursework, broad scholarship built on wide and critical reading, and the ability to do original and independent scholarly work. The department strongly encourages the preparation of the dissertation as a series of published or publishable journal articles.

Doctoral students must participate in one seminar annually (GLY 6982). For details, consult the *Geological Sciences Graduate Handbook*. A minor subject outside the department may be pursued.

The candidate must present to the supervisory committee and publicly defend a description of proposed dissertation research (prospectus). In addition, students must demonstrate by the fourth semester, by means of written and oral examination (preliminary exam), proficiency in their area of specialty and geology related to it. The oral examining committee normally will be comprised of the student's supervisory committee, appointed by the chair. During the term that this oral examination is scheduled, the student must enroll for GLY 8964r, Preliminary Doctoral Examination.

OCEANOGRAPHY

A graduate program in oceanography has existed at Florida State University since 1949. The department offers both the Master of Science (MS) and Doctor of Philosophy (PhD) degrees in oceanography with specializations in biological, chemical, geochemical, and physical oceanography. Especially during the last decade, the oceanography program has gained both national and international recognition. Our faculty members often chair sessions at national and international scientific conferences, and their research is reported in the best professional journals. Oceanography faculty members have been elected Fellows of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the American Meteorological Society, and the American Physical Society. An Emeritus faculty member has also been a recipient of the John Simon Guggenheim Award and has been elected to the National Academy of Sciences, and a current faculty member (Professor Allan Clarke) received the Nansen Medal from the European Geosciences Union.

Current research projects are funded by the National Science Foundation, NOAA, NASA, U.S. Department of Energy, Bureau of Ocean Energy Management, Florida Department of Environmental Regulation, Office of Naval Research, and the National Center for Atmospheric Research. This

combined research includes ocean modeling with supercomputers, direct observations of ocean currents with current meters, analysis of environmental pollution, studies of microbial and zooplankton populations, and benthic ecology.

Frequently utilized external resources include the FSU Coastal Marine Laboratory (FSUCML) at Turkey Point, forty-five miles away from Tallahassee on the Gulf of Mexico; the Department of Scientific Computing; the Geochemistry Program at the National High Magnetic Field Laboratory, and the Electron-Microscopy Laboratory. Internal facilities include laboratories for radiochemistry, trace-element analysis, benthic ecology, water analysis, phytoplankton ecology, numerical modeling, and fluid dynamics. Extensive use is made of the University-National Oceanographic Laboratory System (UNOLS) fleet as well as the Florida Institute of Oceanography vessels, R/V *Bellows* and R/V *Weatherbird*, which are berthed in St. Petersburg. The FSUCML has recently obtained the 65' RV *Apalachee*, which is suitable for research and teaching throughout the NE Gulf of Mexico. The department's students and professors routinely participate in research cruises in oceans and seas around the globe.

Admission Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

All Oceanography degree programs are open to anyone holding a bachelor's degree in one of the natural sciences, mathematics, or engineering. As a minimum standard, a "B" average is expected in all undergraduate classes and GRE General Test scores above the 60th percentile (in both verbal and quantitative) are recommended. Current enrollment trends indicate that a record considerably above the minimum is necessary to assure admission to the limited number of places available. International students whose native language is not English are also required to achieve a score of 80 or better on the Educational Testing Service's Test of English as a Foreign Language (TOEFL) and to take (and report scores to this department) the Test for Spoken English (TSE).

Master of Science (MS) Degree Programs

Master of Science in Oceanography

Oceanography is an interdisciplinary science that studies all aspects of the ocean; biological, chemical, and physical. EOAS offers only the thesis option in Oceanography. A minimum of thirty-three semester hours is required, six of which must be thesis credits. At least 18 credits must be letter-graded coursework taken in the Department of Earth, Ocean, and Atmospheric Science or in other relevant scientific disciplines as deemed in the individual's interest and as the thesis project dictates. Guided by their major professor, students perform original research and write and defend a thesis. Two to two and a half years are normally needed to complete the coursework and research for the master's degree. Students may choose to pursue doctoral study upon completion.

Master's in Aquatic Environmental Science

The Aquatic Environmental Science program provides students with a broad understanding of the interaction of the physics, biology, chemistry, and geology of aquatic (marine and freshwater) systems and how such interactions are affected by and impact human activities.

The Aquatic Environmental Science master's degree program is open to anyone who holds a bachelor's degree in one of the natural sciences, mathematics, or engineering. Applicants must have a 3.0 GPA and GRE General Test scores above the 60th percentile (verbal and quantitative) are recommended.

Aquatic Environmental Science Masters (Non-Thesis Program)

The non-thesis program is course-based and includes a capstone experience. It is intended for students whose career goals do not include the pursuit of scientific research.

Thirty-six hours of 5000-level coursework is required. Three hours must be Capstone Experience credits. In the Capstone Experience, students produce and present a paper on an issue, policy, or problem in environmental science demonstrating adequate knowledge of the environmental science field and the ability to synthesize information from multiple sources into a cohesive and meaningful paper. A faculty director guides students' progress in the program. The University requires that at least twenty-one of the thirty-six hours must be taken on a letter grade basis. The required coursework must be taken in the department of Earth, Ocean, and Atmospheric Science or in other scientific disciplines as the individual's interest and capstone experience paper dictate. An option within the AES program is to obtain a Professional MS degree, which requires three business and management courses that are substituted for selected STEM classes. A joint graduate pathway with the law school is also available; apply through the FSU College of Law.

If an AES student is admitted to the department for a research-based master's, his or her supervisory committee decides on a case by case basis if any courses taken for the course-based program can be applied to the thesis degree requirements.

Aquatic Environmental Science Masters (Thesis Program)

A minimum of thirty-three semester hours are required for the thesis program, six of which must be thesis credits. At least 18 credits must be letter graded coursework taken in the Department of Earth, Ocean, and Atmospheric Science or in other relevant scientific disciplines as deemed in the individual's interest and as the thesis project dictates. Guided by their major professor, students perform original research and write and defend a thesis. Two to two and a half years are normally needed to complete the coursework and research for the master's degree. Students may choose to pursue doctoral study upon completion.

Doctor of Philosophy (PhD) Degree Programs

Doctor of Philosophy in Oceanography

The candidate for the PhD will take 18 credit hours of coursework related to their specialty area (biological, chemical, physical). Students must also fulfill the general MS requirements if they do not have an MS. Candidates must demonstrate competence in the core coursework and in their field of special interest. Candidates must also demonstrate that they are capable of doing independent scholarly research leading to a dissertation, which should be a contribution to the field.

Doctor of Philosophy in Physical Environmental Science

The candidate for the PhD will complete a program of study that meets the needs and career objectives of the student. Students are required to enroll in a seminar each academic year. Candidates must demonstrate competence in coursework and in their area of special interest. Candidates must also demonstrate that they are capable of doing independent scholarly research leading to a dissertation, which should be a contribution to the field.

General Undergraduate Preparation

The recommended preparation for admission to the Oceanography program in EOAS would include one year of college physics, one year of college chemistry, and one year of calculus.

Specialty Undergraduate Preparation

Biological: Bachelor of Science (BS) or Bachelor of Arts (BA) in biology with coursework in organic chemistry and introductory statistics; *Chemical:* BS or BA in chemistry, with coursework in geochemistry and environmental or global-change science; *Geochemical:* BS or BA in geology; *Physical:* BS or BA in physics, geophysics, meteorology, or mathematics or a BS in engineering; coursework in advanced mechanics, differential equations, advanced calculus (including vector calculus), partial differential equations, asymptotic methods, and fluid mechanics.

The MS degree requires that the student complete thirty-three semester hours of coursework and submit a thesis covering an original research topic. Reading knowledge of a foreign language is not required. A minimum of eighteen of the required thirty-three semester hours must be taken in the department of Earth, Ocean, and Atmospheric Science or in other scientific disciplines as the individual's interest and research project dictate.

The student pursuing the PhD degree is required to take eighteen semester hours of formal coursework beyond the requirements for the master's degree and perform original research leading to a dissertation. Doctoral candidates are offered considerable freedom in course load, commensurate with their interests and prior training.

METEOROLOGY

The meteorology program was founded in 1949. At that time, the department had the only meteorology program in the southeastern United States. Throughout its history meteorology has had one of the leading programs in the country and at present is considered to be one of the top ten in the nation for overall excellence of broadly-based programs.

Meteorology graduate students are candidates for either the Master of Science (MS) or Doctor of Philosophy (PhD) degrees. Graduate students normally specialize in dynamic, physical, or synoptic meteorology, or climatology. Faculty members and graduate students in the department are conducting research in many areas, including air/sea interaction, boundary layer meteorology, coastal meteorology, climate prediction, climate changes and global warming, data assimilation, design of meteorological networks, large-scale flow, meso-meteorology, numerical weather prediction, ocean upwelling,

physical climatology, radar meteorology, radiation physics, remote sensing, satellite meteorology, statistical prediction, tropical circulation, turbulence, and vortex dynamics.

National and international honors have been bestowed upon departmental faculty members. Seven members of the meteorology faculty are Fellows of the American Meteorological Society (AMS). Further, Dr. O'Brien (emeritus) has received the AMS Sverdrup Gold Medal; Dr. T. Krishnamurti has received the AMS Second Half Century Award and the Rossby Research Medal, as well as the World Meteorological Organization's IMO Prize; Dr. Ellingson has earned the U.S. Department of Energy Distinguished Associate Award; Dr. Nicholson has received the Hugh Robert Mill Medal from the Royal Meteorological Society; and Dr. Hart was awarded the Banner Miller Award.

Members of the Department of Earth, Ocean, and Atmospheric Science enjoy the benefits from advanced scientific equipment and a cooperative research environment with the Department of Mathematics, the Geophysical Fluid Dynamics Institute, and the Department of Scientific Computing. Scientific computations are handled by local server clusters for relatively simple computations. For larger computational jobs (such as running numerical weather and climate models) the department has access to resources in FSU's high performance cluster (<https://rcc.fsu.edu/services/hpc>).

GOES and NOAA polar-orbiter satellite images are ingested by our direct readout ground stations and are available in real-time at various locations in the Love building and on our Web site, <http://www.eoas.fsu.edu/>. The department also maintains an atmospheric instrumentation laboratory to support education and research in the area of experimental meteorology.

College Requirements

Please review all college-wide requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Admission Requirements

Prior work in meteorology is not a requirement for admission to graduate study in the meteorology program, but candidates must have a strong preparation in mathematics and physics. Each student must have completed or must complete undergraduate level work in synoptic meteorology (MET 4500C; 4501C or equivalent), physical meteorology (MET 4420; 4450 or equivalent), and dynamic meteorology (MET 4301; 4302 or equivalent). MET 5311 and 5312 may be used to substitute for MET 4301 and 4302. It is recommended that all graduate students who have not had coursework equivalent to MET 2700, 2101, 3300, 3502C independently study this material during their first semester in graduate school or consider beginning their graduate program in the summer. Students also should have completed mathematics through partial differential equations (MAP 4341 or equivalent), have had a course in computer programming (CGS 3460 or equivalent), and have had at least one year of physics with calculus. Satisfactory completion of these general requirements is expected to precede graduate level work. A score of at least 300 on the aptitude test (verbal and quantitative) of the Graduate Record Examinations (GRE) and a minimum GPA of 3.0 in upper-division undergraduate courses is normally required for admission to the Earth, Ocean, and Atmospheric Science. Three letters of recommendation are required. Fellowships and assistantships are available to well-qualified applicants. International students whose native language is not English are also required to achieve a score of 80 or better on the Educational Testing Service's Test of English as a Foreign Language (TOEFL) and to take (and report scores to this department) the Test for Spoken English (TSE).

Master of Science (MS) Degree Program

A candidate for the MS degree must satisfy all University-wide MS requirements. At least eighteen semester hours must be earned on a letter grade basis for the thesis plan and twenty-one semester hours for the course plan. The minimum university requirements are thirty semester hours for the thesis plan and thirty-two semester hours for the course plan, of which supervised research (MET 5910) and supervised teaching (MET 5979) can be used for the MS degree. Students electing the thesis plan must have credit for at least six semester hours of thesis (MET 5971). All candidates for the MS degree must satisfactorily pass MET 5930, Master's Seminar. This includes presentation of a seminar to the department and submission of an approved written version of the seminar. All candidates for the MS degree must satisfactorily pass MET 5910, Supervised Research.

Doctor of Philosophy (PhD) Degree Program

Candidates may specialize in many areas including dynamical, physical, or synoptic meteorology, or climatology.

All doctoral candidates in meteorology must satisfy the following requirements: 1) the doctoral preliminary examinations, which may be combined with the master's comprehensive examination; 2) one hour of MET 6930 for

oral presentation of prospectus and one hour of 6930 for oral presentation of dissertation; and 3) an acceptable doctoral dissertation. There is no foreign language requirement.

Definition of Prefixes

ESC—Earth Science

GLY—Geology

ISC—Interdisciplinary Sciences

MAP—Mathematics Applied

MET—Meteorology

OCB—Biological Oceanography

OCC—Chemical Oceanography

OCE—General Oceanography

OCG—Geological Oceanography

OCP—Physical Oceanography

SCE—Science Education

Geology Graduate Courses

ESC 5211r. Current Topics in Earth Science (3). This course is an overview of recent advances in earth sciences for secondary school earth science teachers. May not be taken for major credit in earth science. May be repeated to a maximum of six semester hours.

GLY 5265. Nuclear Geology (3). Prerequisite: GLY 4240 or equivalent. This course discusses the nucleosynthesis and systematics of the nuclides, radioactive and radiogenic isotopes as natural tracers, theory and application of isotopic fractionation.

GLY 5267. Stable Isotopic Tracers in the Environment (3). This course is an introduction to the basic principles of stable isotope geochemistry. The application of stable isotopes to geochemical, hydrological, and ecological problems.

GLY 5297r. Advanced Topics in Geochemistry (1–3). This course consists of special topics on demand in low temperature geochemistry. May be repeated to a maximum of six semester hours.

GLY 5395r. Advanced Topics in Petrology (1–3). This course consists of special topics on demand in igneous, metamorphic, and sedimentary petrology. May be repeated to a maximum of six semester hours.

GLY 5425. Tectonics (3). Prerequisite: GLY 3400C or equivalent. This course explores the advanced treatment of crustal deformation in mountains; the sequence of events and evaluation of deformation styles.

GLY 5455. Introduction to Geophysics (3). Prerequisites: MAP 2302, PHY 2049, or instructor permission. This course focuses on plate tectonics and earth structure. Current methods of probing the interior: seismology and seismic tomography, geomagnetics, geoid and gravity, geochemistry and geochronology. Heat flow, mantle convection, core convection and the geodynamo.

GLY 5465. Geomechanics (3). Prerequisites: MAP 2302, MAP 3305, and PHY 2048C. This course is a systematic investigation of the dynamic behavior of geological materials, in the context of continuum mechanics, with emphasis on one-dimensional motions including seismic waves, surface-water waves, tsunamis, river flows, floods, glaciers, sliding and slumping. As time permits, motions involving thermal effects are considered, including lava flows, volcanic eruptions and certain aspects of flow in the earth's mantle.

GLY 5495r. Advanced Topics in Geophysics (3). Prerequisites: GLY 4451 or GLY 5455. This course consists of special topics on demand in geophysics. May be repeated to a maximum of six semester hours.

GLY 5497r. Advanced Topics in Structural Geology (3). This course consists of special topics on demand in structural geology, rock deformation, and tectonics of mountain building. May be repeated to a maximum of six semester hours.

GLY 5516. Stratigraphy and Sequence Analysis (3). Prerequisite: GLY 3340C. This course focuses on the interpretation of stratigraphic sequences, including an overview of sedimentary petrogenesis; principles of lithostratigraphic, biostratigraphic, and chronostratigraphic correlation; geochronology and geophysical correlation, including magnetic, seismic, and subsurface correlation; tectonics and stratigraphy.

GLY 5575. Coastal Geology (3). In this course, topics include sedimentologic processes operating along modern coasts, erosion and deposition, shoreline evolution, effects of sea level and climate change on shorelines, coastal morphodynamics, responses to critical erosion, and sediment transport.

GLY 5577. Sedimentary Basin Analysis (3). Prerequisite: GLY 4511. This course examines analytical techniques for the interpretation of sedimentary basins, including: lithofacies analysis, depositional systems, thermal history, seismic reflection and sequence stratigraphy. Also addresses climatic and tectonic controls on basin evolution; subsidence modeling, provenance studies and cyclic sedimentation.

GLY 5595r. Advanced Topics in Sedimentation and Stratigraphy (1–3). This course consists of special topics on demand in fluvial, shoreline, and oceanic sedimentation and in stratigraphic principles or regional stratigraphy. May be repeated to a maximum of six semester hours.

GLY 5624C. Introduction to Micropaleontology (3). This course examines the taxonomy, ecology, and paleoenvironmental aspects of selected microfossils with emphasis on foraminifera.

GLY 5695r. Advanced Topics in Paleontology (1–3). This course consists of special topics on demand in paleontology. May be repeated to a maximum of six semester hours.

GLY 5696Cr. Mesozoic Planktonic Calcareous Nannofossils (4–8). This course explores the biostratigraphy, biogeography, and taxonomy of this widely occurring group of marine microfossils. May be repeated to a maximum of eight semester hours.

GLY 5697Cr. Cenozoic Planktonic Calcareous Nannofossils (4–8). This course explores the biostratigraphy, biogeography, and taxonomy of this widely occurring group of marine microfossils. May be repeated for a maximum of eight semester hours.

GLY 5736. Marine Geology (3). This course discusses many topics including shoreline, shelf, and deep ocean processes; marine sediment types and sedimentary environments; plate tectonics; origin of the ocean; paleoceanography; marine mineral resources. The course includes research methods cruise for familiarization with marine geologic sampling and sensing devices. Credit may not be received for both GLY 5736 and OCG 5050.

GLY 5757C. Fundamentals of Remote Sensing, Air Photo Interpretation and GIS for the Earth Sciences (4). Prerequisites: GLY 3400C and PHY 2049. This course covers an introduction to the study of the earth using photographic and electronic imaging acquired from aircraft and satellites; physics of the interaction between electromagnetic radiation and materials of earth's surface and hydrosphere; principles of electronic and microwave imaging; and use of digital analysis and GIS in the study of earth resources and global change.

GLY 5826. Numerical Modeling of Groundwater Flow (3). Prerequisite: GLY 5825. This course is an introduction to many topics including finite difference and finite element methods for groundwater modeling; fundamental equations of groundwater flow; numerical solutions for steady state and transient flow problems; multiphase dispersive flow of contaminants in groundwater.

GLY 5827. Principles of Hydrology (3). Prerequisites: Basic chemistry and basic physics (for science majors). This course focuses on the fundamentals of hydrogeology with emphasis on groundwater flow and hydrochemistry. Both theory and applications are addressed.

GLY 5828. Hydrogeology and Field Methods (3). Prerequisite: GLY 5827. This course introduces the fundamental principles of groundwater flow and solute transport in aquifers and the interactions between groundwater and the environment. The course also introduces field methods essential for studying groundwater in field conditions.

GLY 5885. Geologic Hazards Assessment (3). This course is designed as an overview for understanding the geologic perspective in assessing environmental hazards. Topics covered include: beach processes and erosional effects of severe storms, evaluation of flood-prone and wetland areas, evolution of sink holes, landfill sitings and remediation, mine reclamation problems, contaminant transport and contamination plumes, nuclear waste disposal, slope stability issues, etc.

GLY 5887. Environmental Geology I (3). This course explores the application of geologic and geochemical principles to environmental issues. Topics include: evaluation of contaminants in surface water and ground water; hydrocarbon geochemistry and petroleum storage tank problems; waste management, including solid, toxic and nuclear waste; air quality issues, including radon and asbestos; geologic hazards in upland and coastal areas; environmental geologic methods and instrumentation; quality assurance and quality control in environmental analysis; principles of toxicology; risk assessment and risk management; and environmental assessments.

GLY 5896r. Advanced Topics in Hydrology (1–3). This course consists of special topics on demand in the theory and application of groundwater flow equations, rock-water reactions, and radioactive tracers. May be repeated to a maximum of six semester hours.

GLY 5906r. Directed Individual Study (1–12). (S/U grade only). This course is a study of selected topics as designated by the student and directing professor. May be repeated to a maximum of sixty semester hours.

GLY 5910r. Supervised Research (1–5). (S/U grade only). No more than three semester hours may apply to a master's degree. May be repeated to a maximum of five semester hours.

GLY 5931r. Graduate Seminar (1). (S/U grade only). May be repeated to a maximum of nine semester hours.

GLY 5940r. Supervised Teaching (1–5). (S/U grade only). May be repeated to a maximum of five semester hours. No more than three hours may apply to a master's degree.

GLY 5971r. Thesis (3–6). (S/U grade only). A minimum of six semester hours of credit is required.

GLY 6980r. Dissertation (1–12). (S/U grade only). A minimum of twenty-four semester hours of credit is required.

GLY 6982r. Doctoral Seminar (1). (S/U grade only). May be repeated to a maximum of five semester hours.

GLY 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

GLY 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

GLY 8975r. Master's Thesis Defense (0). (P/F grade only.)

GLY 8985r. Dissertation Defense (0). (P/F grade only.)

ISC 5237. Uncertainty Analysis in Computational Science (3). Prerequisite: ISC 3222 or ISC 5226 or instructor permission. This course includes lectures and computer labs for understanding various uncertainty sources in computational science. Methods are taught for quantifying the uncertainties and their propagation through mathematical and computational modeling. Students learn how to communicate the uncertainty quantification to colleagues and decision-makers. They also discuss how to reduce predictive uncertainty to improve scientific understanding of complex systems.

Oceanography Graduate Courses

Core Curriculum

OCB 5050. Basic Biological Oceanography (3). This course introduces students to the organization of benthic and planktonic communities in the ocean.

OCC 5050. Basic Chemical Oceanography (3). Prerequisite: CHM 1046. This course introduces students to the chemical composition of seawater, carbon dioxide systems, nutrients, trace elements, and biogeochemistry.

OCP 5050. Basic Physical Oceanography (3). Prerequisite: MAC 2311. This course studies seawater properties, currents, waves, tides, and acoustics. Not open to students in physical oceanography option.

Biological Oceanography

OCB 5067C. Ecology of Marine Sediments (4). Prerequisites: BSC 2011, CHM 1046, or instructor permission. In this course, students learn biological, chemical, and physical processes in marine sediments, and complete experiments addressing the ecology of marine sediments.

OCB 5264. Selected Topics in Coral Reef Ecology (3). Prerequisites: OCC 5050, OCG 5051, and OCP 5050. This course addresses selected topics in warm water reef ecology and focuses on the processes that cause the rapid deterioration of reef ecosystems. The lectures explain recent results in reef research, including physical, biogeochemical, and biological process studies. Discussions address initiatives in coral reef protection and management. The course format includes student presentation, readings, and class discussions.

OCB 5565. Marine Primary Production (3). This course studies the factors that affect the biomass production and spatial distribution of phytoplankton, seagrasses, and macroalgae in the ocean. It also explains the key role of marine primary production in the global carbon cycle.

OCB 5635. Selected Topics in Coastal Ocean Ecology (3). Prerequisites: OCC 5050, OCG 5051, and OCP 5050. This course addresses selected topics in coastal ocean ecology with emphasis on changes caused by anthropogenic activities. The lectures address key physical, chemical and biological processes, including coastal upwelling, cycling of matter, hypoxia, and biological diversity changes. The course format includes student presentation, readings, and class discussions.

OCB 5636. Marine Microbial Ecology (3). This course studies the diversity, distribution and roles of marine microbes, whose members include viruses, bacteria, archaea and protists. These are presented through lectures, readings, class discussions, and field trips to regional marine habitats.

OCB 5639. Marine Benthic Ecology (3). Prerequisite: ZOO 4203C. College-level statistics recommended. This course is open to advanced undergraduates with instructor permission. The physical setting and community organization of these habitats are presented through lectures and substantial readings: rocky intertidal, sand beach, subtidal soft bottom, coral reef, deep-sea habitats.

Chemical and Geological Oceanography

OCC 5052. Aquatic Chemistry (3). Prerequisites: CHM 3400 and OCC 5050. This course focuses on thermodynamics, acid-base and redox reactions in natural waters, solution-precipitation reactions, complex formation, case studies of composition of seawater, and controlling processes.

OCC 5062. Marine Isotopic Chemistry (3). Prerequisites: OCC 5050 and OCP 5050. Corequisite: CHS 4100C. This course studies the application of radiochemistry and stable isotope geochemistry in the oceanographic and environmental sciences.

OCC 5415. Marine Geochemistry (3). Prerequisite: OCC 5050. This course introduces students to geochemistry of earth with emphasis on processes controlling elemental cycling between the earth's crust, oceans, and atmosphere. Controls on the chemical composition of seawater and its geological history.

OCC 5417. Geochemical Ocean Tracers (3). Prerequisites: OCC 5050 and OCP 5050. This course focuses on mixing models and processes affecting dissolved concentrations and distributions of chemicals and radiotracers in the world's oceans.

OCG 5664. Paleoclimatology (3). This course examines the paleogeological record of climate change, continental and oceanic archives of past environmental change, processes and models of climate evolution over the Cenozoic with emphasis on the most recent Ice Ages, and readings from the current literature.

Physical Oceanography

MAP 5431. Introduction to Fluid Dynamics (3). Prerequisites: MAP 4153 and PHY 2048C. Corequisite: MAP 4341, MAP 5345, or instructor permission. This course covers physical properties of viscous fluids, hydrostatics, kinematics of flow fields, governing equations. Dynamics of viscous incompressible fluids, vorticity, boundary layer flow, potential flow.

MAP 6434r. Advanced Topics in Hydrodynamics (2). This course covers selected topics such as stability problems, linear and nonlinear theories; regular and singular perturbation techniques. Also offered in the departments of Mathematics, Computer Science, and Meteorology. May be repeated to a maximum of eighteen semester hours.

OCP 5056. Introduction to Physical Oceanography (3). Prerequisite: MAP 2302, PHY 2049C, or instructor permission. This course studies the properties of seawater, equations of motion and continuity of volume, geostrophic motion, stability and double diffusion, ocean currents.

OCP 5160. Ocean Waves (3). Prerequisite: OCP 5253 or instructor permission. This course focuses on topics such as: general properties of waves; surface gravity, capillary, inertia-gravity, internal, Kelvin, Rossby; continental shelf and coastal trapped waves; many illustrations of how ocean variability can be described by free and forced waves.

OCP 5256. Fluid Dynamics: Geophysical Applications (3). Prerequisites: MAP 5431 and partial differential equations, or instructor permission. This course focuses on topics like: shallow water theory, Poincare, Kelvin, and Rossby waves; boundary layer theory; wind driven ocean circulation models; quasigeostrophic motion on a sphere, thermocline problem; stability theories. Also offered by the departments of Mathematics, Computer Science, and Meteorology.

OCP 5263. Equatorial Dynamics (3). Prerequisite: Instructor permission. This course focuses on topics such as: forced and unforced equatorial ocean waves, reflection of equatorial waves from ocean boundaries, equatorial currents, El Niño/Southern Oscillation dynamics.

OCP 5265. Main Ocean Thermocline (3). Prerequisites: MAP 5431, OCP 5261, or instructor permission. This course focuses on topics such as: large-scale ocean dynamics and observations; linear theories; classical nonlinear theories; ventilated-thermocline model and applications; relation of thermocline to ocean circulation.

OCP 5285. Dynamic Oceanography (3). Prerequisite: OCP 5056. This course studies topics such as: currents with friction, effects of turbulence, thermohaline circulation, waves.

OCP 5551. Physics of the Air-Sea Boundary Layer (3). Prerequisites: MET 4302, OCP 5285; or instructor permission. This course focuses on topics such as: flux of momentum, heat and water; study of air sea interaction; mechanisms of exchange and budgets. Also offered by the Department of Meteorology.

Specialized Instruction and Seminar

OCB 5930r. Special Topics in Biological Oceanography (1-3). May be repeated to a maximum of thirty semester hours.

OCB 5939r. Biological Oceanography Seminar (1). (S/U grade only). This course consists of weekly meetings for reports and discussions of recent biological oceanographic research within and outside of the department. May be repeated to a maximum of ten semester hours.

OCC 5930r. Special Topics in Chemical Oceanography (1-3). May be repeated to a maximum of thirty semester hours.

OCC 5939r. Chemical Oceanography Seminar (1). (S/U grade only). This course consists of weekly meetings for reports and discussions of recent chemical oceanographic research within and outside of the department. May be repeated to a maximum of ten semester hours.

OCE 5908r. Directed Individual Study (1-12). (S/U grade only). Study of a selected topic as designated by the student and directing professor. May be repeated to a maximum of 12 semester hours within the same term.

OCE 5910r. Supervised Research (1-5). (S/U grade only). A maximum of three hours may apply to the master's degree, five to the PhD.

OCE 5940r. Supervised Teaching (1-5). (S/U grade only). A maximum of three hours may apply to the master's degree, five to the PhD.

OCP 5930r. Special Topics in Physical Oceanography (1-3). May be repeated to a maximum of thirty semester hours.

OCP 5939r. Physical Oceanography Seminar (1). (S/U grade only). This course consists of weekly meetings for reports and discussions of recent physical oceanographic research within and outside of the department. May be repeated to a maximum of ten semester hours.

General Oceanography

OCE 5009. Advanced General Oceanography (3). This course is an overview of geological, physical, chemical, and biological oceanography. The major hypothesis in each subdiscipline is described. Cross-linkages between subdisciplines are used to show the interdisciplinary nature of modern oceanography.

OCE 5009L. Coastal Oceanography and Marine Field Methods (4). Prerequisite: Enrollment in a natural or environmental science graduate program. This course provides a multidisciplinary, hands-on experience of the field methods most commonly used in oceanography. It gives graduate students the opportunity to gain a greater appreciation of the complexity of marine-ecosystem dynamics through active participation in ocean-science field research.

OCE 5018. Current Issues in Environmental Science (3). This course is taught at an introductory level and includes discussions of current ground-breaking research, environmental problems and approaches to solving them. This course consists of presentations by experts on their current research topics or on environmental issues.

OCE 5065. Marine Conservation Biology (3). This course helps students understand anthropogenic impacts on the world's marine biological resources and ways to mitigate those impacts.

OCE 5077. Marine Environment Pollution (3). Prerequisite: BSC 2011, CHM 1046, or instructor permission. This course explains sources of marine pollutants, their effects on organisms, and ensuing consequences for marine ecosystems. Focal points are persistent anthropogenic pollutants that accumulate in the estuarine and marine environment. Pollutant amplification in the food web, physiological responses and degradation pathways are discussed.

OCE 5934r. Capstone Experience (3). Prerequisite: Instructor permission. This course explores a variety of environmental issues of local to global scale. Format varies between student and professor presentations. Students are guided to produce a terminal master's project through this course. May be repeated to a maximum of six semester hours.

OCE 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

OCE 6980r. Dissertation (1–12). (S/U grade only). A minimum of twenty-four semester hours is required.

OCE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

OCE 8976r. Master's Thesis Defense (0). (P/F grade only.)

OCE 8985r. Dissertation Defense (0). (P/F grade only.)

Meteorology Graduate Courses

Dynamical Meteorology

MAP 5431. Introduction to Fluid Dynamics (3). Prerequisites: MAP 4153 and PHY 2048C. Corequisites: MAP 3306, MAP 4341, MAP 5345, or instructor permission. This course covers the physical properties of viscous fluids, hydrostatics, kinematics of flow fields, governing equations. Dynamics of viscous incompressible fluids: vorticity, boundary layer flow, potential flow.

MAP 6434r. Advanced Topics in Hydrodynamics (3). This course covers selected topics such as stability problems, linear and nonlinear theories; regular and singular perturbation techniques. Also offered in the departments of Mathematics, Computer Science, and Meteorology. May be repeated to a maximum of eighteen semester hours.

MET 5311. Advanced Dynamic Meteorology I (3). Prerequisites: MAP 3306 or MAP 4341, PHY 2049C. This course covers coordinate systems; conservation equations for mass, momentum, and energy; equation of state; scaling; generalized vertical coordinates; geostrophic, gradient, cyclostrophic wind; thermal wind; vorticity and divergence equations; the omega equation; Reynolds averaging and turbulence; boundary layer and Ekman layer dynamics.

MET 5312. Advanced Dynamic Meteorology II (3). Prerequisite: MET 5311. This course covers scale analysis of the vorticity, divergence, and omega equations; quasi-geostrophic quasi-nondivergent systems; synoptic development of baroclinic disturbances; linear perturbations; sound, gravity, Rossby waves. Baroclinic instability; the two-level model; numerical weather prediction.

MET 5340r. Large-Scale Atmospheric Circulations (3). Prerequisite: MET 4302 or MET 5312. This course covers large scale atmospheric circulations featuring observational and experimental studies (global distribution of meteorological variables, momentum, and energy budgets; meridional circulation; available energy; laboratory studies) and theoretical studies (Eady baroclinic instability model, integral theorems, numerical models, flow-over topography, wave-mean interactions). May be repeated to a maximum of six semester hours. May be repeated in the same semester.

MET 5406. Satellite Observations and Their Applications in Numerical Weather Prediction (3). Prerequisites: MAP 3305 or equivalent computer programming. This course covers techniques, research, and operational applications related to satellite observations and their applications in numerical weather prediction. Students gain hands-on experience and a comprehensive understanding of data assimilation and related application problems in atmospheric science.

MET 5541r. Dynamical Weather Prediction (3). Prerequisite: MET 4301 or MET 5311. This course covers prediction of atmospheric and oceanic flow patterns by numerical methods; numerical solution of partial differential equation; modeling. May be repeated to a maximum of six semester hours.

MET 6308r. Advanced Topics in Dynamical Meteorology (3). Prerequisite: Instructor permission. May be repeated to a maximum of eighteen semester hours.

OCP 5256. Fluid Dynamics: Geophysical Applications (3). Prerequisite: MAP 5431 or instructor permission. This course focuses on topics like: shallow water theory, Poincare, Kelvin, and Rossby waves; boundary layer theory; wind driven ocean circulation models; quasigeostrophic motion on a sphere, thermocline problem; stability theories. Also offered by the departments of Mathematics, Computer Science, and Oceanography.

Physical Meteorology

MET 5407. Fundamentals of Atmospheric Data Assimilation (3). Prerequisites: MAP 3305 or equivalent computer programming. This course provides the fundamentals of objective analysis and data assimilation with an emphasis on the physical aspects of objective analysis. Students learn how the general mathematical concepts and methods are applied to solve many practical data analysis and assimilation problems in atmospheric science.

MET 5411. Radar Meteorology (3). Prerequisite: MET 4450 or instructor permission. This course discusses topics such as principles of incoherent and doppler radar; radar as an observational and analytical tool. The use of radar in basic research.

MET 5421. Radiative Transfer (3). Prerequisite: MET 4450 or instructor permission. This course covers molecular absorption, band models, solar and terrestrial radiative fluxes, and heating rates in the troposphere and stratosphere. Radiative properties of atmospheric aerosols.

MET 5425. Advanced Atmosphere Physics I (3). Prerequisites: MAC 2313 or equivalent, MET 2700, PHY 2048C, and PHY 2049C. This course covers classical equilibrium thermodynamics; first and second law, entropy, phase changes, and potentials; physics of moist air; physics of aerosols; and condensation of water vapor on aerosols.

MET 5451. Advanced Physical Meteorology II (3). Prerequisite: MET 5425 or equivalent. This course examines the interaction between electromagnetic radiation and the atmosphere; absorption and emission of light by the sun, the earth, and various components of the atmosphere, and the transfer of energy and scattering of radiation by the atmosphere.

MET 5455. Cloud Physics (3). Prerequisites: MET 4420, MET 4450, or instructor permission. This course covers microphysics of clouds; development of warm and cold rain processes; hail formation; microphysical parameterizations; microphysical basis for weather modification and electrification.

MET 5471. Satellite Remote Sensing of Planetary Atmospheres (3). Prerequisites: MET 4450; MET 4302 or MET 5312, or instructor permission. This course covers composition, extent, properties, cloud forms, general circulation; geophysics of the planets; theoretical deductions; implications for general circulation on Earth.

MET 6480r. Advanced Topics in Physical Meteorology (3). Prerequisite: Instructor permission. May be repeated to a maximum of eighteen semester hours.

Synoptic Meteorology

MET 5505C. Advanced Synoptic Lecture-Laboratory I (3). Prerequisite: CGS 3460. Corequisites: MET 5311 and MET 5425. This course is an analysis of scalar and vector fields, an introduction to the three-dimensional structure of atmospheric systems, and thermodynamic diagrams.

MET 5506C. Advanced Synoptic Lecture-Laboratory II (4). Prerequisites: MET 5311, MET 5420, MET 5500C, and STA 2122. This course covers synoptic calculation and four-dimensional analysis of weather systems.

MET 5510C. Midlatitude Synoptic Scale Systems (4). Prerequisite: MET 4501C or instructor permission. This course is a lecture-laboratory on the structure and dynamics of middle-latitude atmospheric systems.

MET 5511C. Meso-Meteorology Lecture Laboratory (4). Prerequisite: MET 4501C. This course covers structure and dynamics of mesoscale atmospheric systems.

MET 5533. Tropical Meteorology I (3). Prerequisite: MET 4501C. This course is a lecture-laboratory on planetary and synoptic-scale systems of the tropics including hurricanes.

MET 5534. Tropical Meteorology II (3). Prerequisite: MET 4501C. This course covers convection, boundary layer processes, local weather phenomena, mesoscale tropical systems, hurricane structure.

MET 6561r. Advanced Topics in Synoptic Meteorology (3). Prerequisite: Instructor permission. May be repeated to a maximum of nine semester hours.

Climatology

MET 5105. Global Climate System (3). Prerequisite: Basic climatology course or instructor permission. This course examines global climate system from radioactive and surface exchange processes. Their role in climate dynamics and climatic change is considered.

MET 5117. Regional Hydroclimatology (3). Prerequisites: MET 5312 and MET 5506C. This course dwells on the physical and dynamical basis for the maintenance and variations of regional hydroclimate in the current and a changing future climate.

MET 5135. Dynamic Climatology (3). Prerequisite: Basic climate course or instructor permission. This course is an examination of climatology from both a synoptic and dynamic perspective. Regional climates are studied in the context of prevailing synoptic systems and links with general circulation features. Global patterns of climate and forcing mechanisms of climate variability are described.

MET 6147r. Linking Weather and Climate (1–3). Prerequisites: MET 4301, MET 4302, MET 4420, MET 4450, MAP 2302, and MAP 4341. This course shows how weather and climate are intricately linked, and how to analyze and model this two-way interaction using advanced dynamics and statistics.

MET 6155r. Advanced Topics in Climatology (1–3). Prerequisite: Instructor permission. This course covers advanced topics and recent advances in climatology. Content varies covering such areas as climate modeling, physical climatology, dynamic climatology, climate change, and climate and the oceans. May be repeated up to six times to a maximum of eighteen semester hours.

Other Courses

MET 5090r. Applied Time Series Analysis (3). Prerequisites: CGS 3460, MAP 3306, and STA 2122. This course analyzes real and complex-valued meteorological and/or oceanographic time series in the frequency and time domains by writing computer programs. May be repeated to a maximum of six semester hours.

MET 5403C. Meteorological Instruments and Observations (3). Prerequisites: MET 2700 and PHY 2048C. This course covers the theory and practice of calibration and operation of basic sensors measurement of temperature, heat flow, fluid flow, pressure and moisture.

MET 5607. Atmospheric Composition, Chemistry, and Climate (3). Prerequisites: MET 4420 or MET 4500C or OCC 5050; or instructor permission. This course examines the role of atmospheric chemistry in air pollution, climate change, and environmental health. Students examine the physical and chemical processes that control the composition of the atmosphere and the global cycles of airborne pollutants and nutrients. The course is organized around marquee environmental issues: surface and stratospheric ozone, acid rain, aerosols, greenhouse gas budgets, and toxic metals.

MET 5905r. Directed Individual Study (1-3). (S/U grade only). May be repeated to a maximum of twenty-four semester hours.

MET 5906r. Directed Individual Study (1-3).

MET 5910r. Supervised Research (1-5). (S/U grade only). Three semester hours are required for a master's degree. May be repeated to a maximum of five semester hours in each of the master's and doctoral programs.

MET 5930. Master's Seminar (2). Prerequisite: Instructor permission. This course covers reports and discussions of meteorological research. All master's degree candidates give an oral presentation and prepare a written report.

MET 5971r. Thesis (1-6). (S/U grade only). A minimum of six semester hours is required.

MET 5979r. Supervised Teaching (1-5). (S/U grade only). A maximum of three hours may apply toward a master's degree. May be repeated to a maximum of five semester hours in each of the master's and doctoral programs.

MET 6906r. Directed Individual Study (1-3). (S/U grade only). May be repeated to a maximum of twenty-four semester hours.

MET 6930r. Doctoral Seminar (1). Prerequisite: Instructor permission. This course covers reports and discussions of meteorological research. Doctoral candidates give an oral presentation of their prospectus or dissertation. A minimum of two semester hours is required.

MET 6980r. Dissertation (1-12). (S/U grade only). Prerequisite: Admission to Doctoral candidacy.

MET 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

MET 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

MET 8976r. Master's Thesis Defense (0). (P/F grade only.)

MET 8985r. Dissertation Defense (0). (P/F grade only.)

OCP 5551. Physics of the Air-Sea Boundary Layer (3). Prerequisites: MET 4301 and OCP 5285; or instructor permission. This course focuses on topics such as flux of momentum, heat, and water; study of air-sea interaction mechanism of exchange and budgets. Also offered in the Department of Oceanography.

SCE 5836C. Teaching Earth and Space Science (3). This course includes the traditional discipline categories of geology, meteorology, astronomy, and oceanography. The course utilizes National Science Education standards to organize subject matter, which is the focus of this pedagogical course.

DeVoe L. Moore Center for the Study of Critical Issues In ECONOMIC POLICY AND GOVERNMENT Graduate Programs

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <http://www.coss.fsu.edu/dmc/>

Director: Samuel R. Staley; **Eminent Scholar:** Keith Ihlanfeldt; **Professors:** Benson, Chapin, Clapp, Feiock, Gwartney, Holcombe, Rasmussen

The DeVoe L. Moore Center for the Study of Critical Issues in Economic Policy and Government is an interdisciplinary unit in the College of Social Sciences and Public Policy dedicated to increasing knowledge and public understanding about the role of government in a market economy. The center emphasizes the study of how government rules, regulations, and programs affect the economy and individuals. Bringing the insights of economics, political science, and public administration to the study of state and local regulations is a major focus of the center's efforts.

The center's faculty engages in research and public policy analysis designed to increase understanding about the effects of local and state rules and regulations. The center recently added social entrepreneurship as a core focus of its activities. The center also sponsors annual conferences that bring national leaders and scholars to The University to discuss policy questions. Graduate students in the College of Social Sciences and Public Policy are encouraged to participate in the program's annual conferences, symposia, and research projects. Graduate and undergraduate students are employed on research and grant projects on the basis of their contributions in time and skill. The center sponsors DIS and internship opportunities for students interested in applied policy research and social entrepreneurship. The center offers fellowships for students writing dissertations on subjects related to the center's mission.

**ECOLOGY:
See Biological Science**

Graduate Department of ECONOMICS

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <http://www.coss.fsu.edu/economics/>

Chair: Manoj Altolia; **Professors:** Atolia, Cooper, Gwartney, R. Holcombe, Ihlanfeldt, Isaac, Kantor, Marquis, Mason, S. Norrbin, Rasmussen, Ryvkin, Semykina, Schmertmann; **Associate Professors:** Beaumont, Cano Urbina, Hamman, Kitchens, Krishna, Pevnitskaya, Zuehlke; **Assistant Professors:** Baek, Boosey, Dmitriev, Grossman, Kreamer, Rodgers; **Associate Teaching Professors:** Calhoun, L. Holcombe, Lee, O. Norrbin, Sherron; **Assistant Teaching Professors:** Ardakani, Hammock; **Courtesy and Adjunct Professors:** Bergan, Evans, Grober, Stratis; **Professors Emeriti:** Benson, Canterbury, Cobbe, Downing, Fournier, Laird, Macesich, McCaleb, Rockwood, Schlagenhauf

The Department of Economics offers programs leading to the Master of Science (MS) in Applied Economics, the Master of Science (MS) in Economics, and Doctor of Philosophy (PhD) in Economics degrees.

The department has a history of emphasizing research and publication. Department graduates have found a ready market in academe, in government at all levels, and in business. The department offers students an opportunity to specialize in ten different fields, in addition to core areas of study. At least two professors have expertise in any given field of specialization. These factors, along with a highly favorable student-faculty ratio, permit much personal interaction between students and professors and allow for considerable flexibility in the program of study a student might choose.

In addition to listed fields of study, the department offers students the opportunity for interdisciplinary work. A variety of interdisciplinary programs is available, including demography, gerontology, economics of education, law and economics, urban economics, and economic policy and government. Specialties in other fields outside the department, particularly statistics, finance, and other areas in the social sciences, are also available.

A detailed description of graduate work in economics appears in the *Guide for Graduate Students in Economics*. The *Guide* may be obtained by visiting the department Web page at <http://www.coss.fsu.edu/economics/>.

Admission Requirements

The Department of Economics accepts applications for two programs: Master of Science (MS) in Applied Economics and Doctor of Philosophy (PhD) in Economics. Both programs begin in the Fall semester. The Master of Science (MS) in Economics degree is only available to students admitted to the Department of Economics at the PhD level.

A score of at least 148 on the verbal aptitude portion and 148 (MS) or 151 (PhD) on the quantitative aptitude portion of the Graduate Record Examination (GRE) and an upper division undergraduate grade point average of at least 3.0 are required for admission. Prior graduate training must show a minimum grade point average of 3.4.

Applicants should provide the department with official transcripts from all prior institutions, a statement of purpose, a résumé or curriculum vitae, and at least two (MS) or three (PhD) letters of recommendation addressing the applicant's potential for graduate study. Academic recommendations are preferred.

International applicants, whose native tongue is not English, must achieve a minimum score of 90 on the IBT Test of English as a Foreign Language (TOEFL). With the approval of the University Office of Graduate Admissions, an exception to this rule can be made for those who have a degree from an English-speaking country.

Applied MS applicants are required to complete Principles of Macroeconomics and Microeconomics, one semester of calculus, and one semester of statistics prior to starting the program. In addition, applicants need to have sufficient upper-level economics courses to demonstrate a thorough understanding of economics. Such an understanding is best demonstrated by doing well in Intermediate Microeconomics, Intermediate Macroeconomics, and Econometrics. PhD applicants are required to complete all of the aforementioned courses prior to starting the program, as well as a second semester of calculus and one semester of linear algebra.

All new PhD students should arrive on campus four to five weeks prior to beginning of the Fall term for mandatory math review.

Application Deadlines

Completed admission applications for U.S. citizens should be submitted no later than two months prior to the Fall term; foreign nationals should apply no less than three months ahead. All application materials are to be submitted via the online application (<http://admissions.fsu.edu/apply/>); no hard copies of documentation will be accepted by the department. It is recommended that

those interested in being considered for a departmental research or teaching assistantship have a completed application on file with the Department of Economics by February 15 for fall entry into the graduate program.

Departmental Teaching and Research Assistantships

Departmental funding is awarded competitively, not only to provide financial assistance but also to afford outstanding students a structured experience in teaching and research. All applicants are considered for departmental funding and the strongest applicants may be nominated for University fellowships. Students can expect departmental funding to continue for up to four years (although it is awarded on a year-by-year basis), assuming timely progression on degree requirements, success in the academic program, adequate funding allocations to the department, and satisfactory performance of assistantship duties. Graduate assistants with qualifying appointments will receive a salary and a tuition waiver.

Master of Science (MS) Degree Programs

Master of Science (MS) in Applied Economics

The Applied Economics MS degree at FSU is designed to be a self-contained program which gives the successful student valuable skills as an applied economist. Graduates with such skills are in demand by both the public and private sectors. This is intended to be a terminal degree and not preparation for entry into a doctoral program. Most full-time students will complete the program in a calendar year (Fall-Summer).

There are six required courses (eighteen semester hours) for the Applied MS degree that must be completed with a minimum GPA of 3.0; two each in microeconomics (ECO 5114 and ECO 5117), macroeconomics (ECO 5206 and ECO 5208), and econometrics (ECO 5420 and ECO 5434).

Students following the project-track of this program complete at least eight hours of graduate-level coursework beyond the required core courses, which typically involves two economics electives (six hours) approved by the Program Director and two semesters of the seminar course ECO 5922, Professional Development for Economists (two hours). Completion of the applied project involves registration and attendance in ECO 5973 during the Summer B and Summer C sessions and ECO 5973L during Summer A session for three hours each. During this sequence, the student selects, writes, and presents an applied project. The project track requires a minimum of thirty semester hours of graduate credit, including the required courses.

Students following the thesis-track of this program complete at least six hours of graduate-level coursework beyond the required core courses, which typically involves two economics electives (six hours) approved by the Program Director and two semesters of the seminar course ECO 5922 taken for zero hours. In addition, the student writes a thesis for which at least six hours of ECO 5971 are granted. The thesis committee consists of a major supervisory professor and two other members of the Economics Department (or, if appropriate, one other department member and one "outside" professor), subject to the approval of the Program Director. An oral defense of the thesis is required (ECO 8976), where all members of the Economics Department are invited to attend. All students must adhere to the rules and deadlines governing thesis submission as detailed by The Graduate School. The thesis-track requires a minimum of thirty semester hours of graduate credit, including the required courses.

Students may substitute graduate courses offered by other departments for the economics electives, provided they can demonstrate the relevance of the coursework to their program of study and provided they obtain prior approval of the Program Director.

Master of Sciences (MS) in Economics

The Master of Science (MS) in Economics is offered via the "PhD track." Students interested in this degree must apply to and be admitted at the PhD program level. The thesis and applied project options are not available with this degree.

A student following the traditional MS program will be awarded an MS degree after completing the doctoral core courses in microeconomics (ECO 5115 and ECO 5116), macroeconomics (ECO 5204 and ECO 5207), and econometrics (ECO 5416 and ECO 5423), plus one course in mathematical economics (ECO 5405), and at least twelve additional credit hours of elective courses. The elective courses require prior approval of the Graduate Director. Supervised research (ECO 5914), supervised teaching (ECO 5940), and workshops do not count toward the required elective hours. The six core courses must be completed with a minimum GPA of 3.0. In the event that a student

must retake one (or more) of these courses in order to satisfy the core GPA requirements, the department will use the higher of the grades earned in the two attempts when making core GPA calculations.

Doctor of Philosophy (PhD) Program

The PhD in economics is a research degree which requires that the student demonstrate an ability to understand the body of economic knowledge, to communicate that knowledge, and to contribute to it.

The core courses in Economic Theory, for a total twenty-seven hours, consist of two courses in microeconomics (ECO 5115 and ECO 5116), two courses in macroeconomics (ECO 5204 and ECO 5207), two courses in econometrics (ECO 5416 and ECO 5423), one econometrics field course (ECO 5424, ECO 5427, or ECO 5428), one course in mathematical economics (ECO 5405), and one course in the history of economic thought (ECO 5305). Students must show competence by passing core examinations in the areas of macroeconomics and microeconomics. The PhD core examinations are administered in May and August. If a student fails one or both exams, a retake of the failed component is required for the following August. Students are only allowed one retake. A student who elects not to take the exam in May forgoes the opportunity for a retake, and must pass the exam on the first attempt the following August.

PhD students must select both a major and minor field of specialization. In order to satisfy the field requirements, a student must complete at least two courses (per field; total of twelve hours) with a minimum GPA of 3.75 in the major field and 3.5 in the minor field. No single course may count for more than one field. The two specialized fields are to be selected from the following list or, with approval of the Graduate Director, the student may take work in one outside field:

- Applied econometrics
- Experimental economics
- Financial and monetary economics
- Industrial organization and regulation
- International economics and development
- Labor economics
- Law and economics
- Population economics
- Public economics
- Urban economics

The Department offers two to four workshops (ECO 6938) each semester in which advanced research topics are critically reviewed. Participants in these workshops attend seminar sessions, prepare formal discussion comments, and present ongoing research. Participation in at least one workshop every Fall and Spring semester, graded on a S/U basis and generally taken for zero credit hours, is a requirement of the PhD program.

A doctoral student must complete fifty-four semester hours of graduate coursework, including instruction in fundamental quantitative techniques, and may obtain the traditional master's degree en route. No more than six of the required fifty-four hours may be directed individual study (ECO 5906 or ECO 5907) or graduate tutorial coursework (ECO 5932). The fifty-four semester hours consists of twenty-seven hours from the Economic Theory core, twelve hours from the major and minor fields, and fifteen hours of electives approved by the Graduate Director. After passing core examinations and successfully defending a dissertation prospectus (ECO 8969), students may be admitted to doctoral candidacy with the approval of the Department Chair.

In consultation with the faculty and graduate student advisor, students are expected to design a program that provides the preparation necessary for the PhD core examinations and for the analysis required in dissertation work. The dissertation entails a minimum of twenty-four hours of credit (ECO 6980), is written under faculty supervision, and must be orally defended (ECO 8985) in accordance with the deadlines and regulations of The Graduate School. University regulations require that all committee members and the student must attend the entire defense in real time, either by being physically present or participating via distance technology. The department abides by University regulations and does not impose any further restrictions.

Definition of Prefixes

ECO—Economics

ECP—Economic Problems and Policy

ECS—Economic Systems and Development

Graduate Courses

Note: The department offers some graduate courses that are normally not taken by graduate students pursuing degrees in economics but which are intend-

ed mainly for students in other programs in the College of Social Sciences and Public Policy, such as international affairs, or in other colleges of the University. These courses include ECO 5005, 5403, 5413, 5707, 5715, ECP 5536 and 5538. [These courses may NOT be used to meet requirements for a graduate degree in Economics.] Where ECO 2013 and 2023 are listed as prerequisites for those courses, ECO 5005 may be substituted for ECO 2013 and 2023.

ECO 5005. Economic Principles for International Affairs (3). This course serves as an introduction to economics for graduate students in majors other than economics. Covers material in ECO 2013 and ECO 2023 in one semester. Intended for international affairs graduate students and similar.

ECO 5056. Decision Making Under Risk and Uncertainty (3). This course is an introduction to the theory of economic decision-making under risk and uncertainty. Emphasis is placed on developing and applying alternative theories of decision-making to insurance markets, financial markets, and the negotiation of contracts.

ECO 5114. Applied Microeconomics I (3). This is a beginning graduate-level course in microeconomic analysis. The course is designed to prepare students for subsequent work in microeconomic analysis and in applied microeconomics courses such as public finance, industrial organization, and labor economics.

ECO 5115. Product Markets and the Theory of the Firm (3). This course examines consumer choice, demand theory, production theory, costs, market supply, theory of the business firm, and allocation under the competitive market structure. Undergraduate price theory is a prerequisite.

ECO 5116. Imperfect Competition, Factor Markets, and Income Distribution (3). Prerequisite: ECO 5115 or instructor permission. This course covers topics such as monopoly, oligopoly monopolistic competition, derived demand and theory of factor markets, general equilibrium analysis, welfare economics, interdependencies, income distribution, and public choice theory.

ECO 5117. Applied Microeconomics II (3). Prerequisite: ECO 5114. This course explores such topics in applied microeconomics as demand estimation, hedonic models, cost functions, cost-benefit analysis, tax incidence, event studies, selection bias, and earnings equations. A student project is required.

ECO 5133. Markets and Auctions (3). This course familiarizes students with relevant topics, literature, and research techniques in the field of experimental economics.

ECO 5134. Applied Market Design (3). Prerequisite: ECO 5114. This course explores the theory and practice of market design. Particular emphasis is placed on understanding how the rules and institutional features of different market-based mechanisms can be engineered to solve resource allocation problems. The course focuses on applications of two-sided matching markets, single-unit and multi-unit auctions, and markets for transferable permits.

ECO 5204. Macroeconomic Theory I (3). This course introduces the basic tools in macroeconomic theory.

ECO 5206. Macroeconomic Theory, Practice, and Policy (3). This course investigates aggregate production functions and productivity, and provides an introduction to dynamic macro systems.

ECO 5207. Macroeconomic Theory II (3). Prerequisite: ECO 5204 or instructor permission. This course explores further macro dynamics, the quantity theory, determinants of the demand for and supply of money, and money models.

ECO 5281. Financial Economics I (3). This course is intended to provide a comprehensive introduction to the field of financial economics. The class focuses on static and dynamic consumption based on asset pricing models and a few elementary applications. The class is designed to set up the framework for models with production, financial institutions and monetary policy issues, which is the basis for more advanced work.

ECO 5282. Financial Economics II (3). This course focuses on three broad areas: production-based asset pricing theory and corporate finance; financial intermediation; and monetary theory and policy. Particular emphasis is placed on the economic role played by commercial banks in private information economies, and on the effect of Federal Reserve policy on financial markets.

ECO 5295. Macroeconomic Theory III (3). Prerequisites: ECO 5204 and ECO 5207; or instructor permission. This course introduces advanced graduate students to the core concepts and techniques used in cutting-edge academic research. The course covers essential techniques for analyzing macroeconomic data and for mapping data to theoretical models; and covers the core models commonly used in macroeconomic research.

ECO 5305. History of Economic Thought (3). This course covers analysis and critique of economic ideas, beginning with the Greeks. Concentration is upon classical economists.

ECO 5403. Static Optimization in Economics (3). This course examines mathematical methods used for the solution of static optimization problems in economic theory.

ECO 5405. Introduction to Mathematical Economics (3). This course focuses on the use of mathematical economic models, equilibrium analysis, linear algebra, comparative static analysis, optimization problems, and dynamic problems.

ECO 5408. Computational Economics I (3). Prerequisite: ECO 5423. In this course, topics include solutions of linear and nonlinear systems of equations, numerical integration and differentiation, optimization, Monte Carlo and stochastic simulation, finite element and spectral solution methods for ordinary and partial differential equations, dynamic programming and stochastic optimal control, and asymptotic perturbation methods.

ECO 5416. Econometrics I (3). This course is an introduction to econometric methods focusing on the statistical foundation for estimation and inference in the classical regression model.

ECO 5417. SAS for Economists (3). Prerequisite: One semester of graduate level econometrics or instructor permission. This course uses the SAS programming language to manipulate data and to estimate econometric models. Topics that are covered include: database construction using the output and retain statements; conducting multivariate regressions; and the use of the SAS macro facility.

ECO 5420. Applied Econometrics (3). This course introduces statistical concepts used in econometric thinking, reviews the classical linear regression model, and discusses applications to economic data.

ECO 5423. Econometrics II (3). Prerequisite: ECO 5416 or instructor permission. This course considers extensions of the classical regression model. Topics include nonlinear least squares, instrumental variables estimation, and generalized least squares.

ECO 5424. Econometric Methods for Panel Data (3). Prerequisites: ECO 5416, ECO 5423, and ECO 5427. This course provides students with the tools necessary for working with panel data, in order to evaluate different methods and their applicability to particular estimation problems. Topics are typically not included in econometrics core courses, yet are important in empirical research. Focus is on the analysis of cross-section and panel data, and on the discussion of linear and nonlinear models.

ECO 5427. Limited Dependent Variable Models (3). Prerequisite: ECO 5423. This course introduces graduate students to logit, probit, tobit, multinomial logit, selection, and hazard models.

ECO 5428. Time Series Analysis (3). Prerequisite: ECO 5423. This course explores univariate and multivariate time series methods including: univariate ARIMA, transfer function models, state space models, vector auto-regression models, vector error correction models, spectral analysis, causality tests, and unit root tests. Data analysis and model building are emphasized.

ECO 5434. Analysis of Economic Data (3). This course focuses on methods of analyzing economic data, in addition to teaching students how to accurately read and interpret articles containing economic data. The course includes a look at various statistical analysis software available, applying statistical software to analyze economic data, interpreting the meaning of the statistical output, and presenting the findings in a meaningful manner.

ECO 5453. Advanced Experimental Economics (3). This course provides a PhD level introduction to experimental economics. The first section of the course focuses on how to run an economic experiment. After this, the course studies four major areas of economics that have been changed by experimental economics: (1) decision making under risk and uncertainty, (2) models of fairness and reciprocity, (3) game theoretic models and (4) models of markets. The course stresses student participation, and ends with a presentation of student research projects.

ECO 5454. Empirical Methods in Applied Economics (3). Prerequisites: ECO 5115, ECO 5116, ECO 5204, ECO 5207, ECO 5416, and ECO 5423. This course examines empirical methods used in performing applied economics research using a wide range of academic papers that have used the relevant techniques.

ECO 5457. Introduction to Research Methods in Economics (0). (S/U grade only.) This course demonstrates how to apply economic analysis and teaches how to construct these analyses in a variety of research settings. In addition to exposing students to ongoing research in a variety of fields and current research ongoing in the department, this course teaches students how to communicate their research both in written form and in presentations.

ECO 5505. Public Economics (3). This course examines the principles of taxation and debt, shifting and incidence, public expenditures and redistribution theory.

ECO 5506. Public Goods (3). Pre- or corequisite: Approved course in Experimental Economics. This course explores the theory, empirical evidence, and experimental evidence regarding how human societies provide public goods.

ECO 5533. Public Choice (3). This course focuses on the role of government, public goods and externalities, voting and collective choice, bureaucracy theory, and political structure and economic organization.

ECO 5706. Seminar in International Trade Theory and Policy (3). This course explores the theories of the cause, magnitude, and patterns of real trade among nations, ranging from comparative cost explanations to Heckscher-Ohlin theories and recent approaches. Policy issues regarding contemporary international trade problems, the role of tariffs, and quotas also are covered.

ECO 5707. International Trade (3). Prerequisites: ECO 2013 and ECO 2023. This course focuses on the theory of international trade, the gains from trade, tariffs and other trade restrictions, cartels.

ECO 5715. International Finance (3). Prerequisites: ECO 2013 and ECO 2023. Recommended prerequisites: ECO 3203 and ECO 3223. This course explores topics such as balance of payments; disequilibrium and adjustment; birth, evolution, and demise of the Bretton Woods System; the managed float; international monetary reform; international factor movements, multinational corporations.

ECO 5906r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

ECO 5907r. Directed Individual Study (3). Prerequisite: Instructor permission. May be repeated to a maximum of nine semester hours.

ECO 5914r. Supervised Research (1-5). (S/U grade only). May be repeated to a maximum of five semester hours.

ECO 5922r. Professional Development for Economists (0-2). Prerequisite: Admission to MS program in economics. This course covers issues of ethics and responsibilities for professional economists. Faculty and visiting economists offer presentations and discussions of the work of professional economists in the public and private sectors. May be repeated to a maximum of three semester hours.

ECO 5936r. Special Topics (1-3). This course covers special topics of current interest or of benefit from the specialties of visiting faculty. May be repeated in the same semester.

ECO 5942. Applied Economics Internship (3). (S/U grade only). This course is intended to facilitate the transition from the academic world to the workplace for students in the project-track Economics MS degree.

ECO 5971r. Thesis (3-6). (S/U grade only). A minimum of six semester hours is required.

ECO 5973r. Applied Master's Project (3). Prerequisites: ECO 5114, ECO 5117, ECO 5206, ECO 5208, ECO 5420, ECO 5434, or instructor permission. As the capstone for the applied master's degree, this project requires students to use theory, research methods, and analytical procedures learned in the program to research an applied economics question. Findings are presented in both oral and written format. The 3-hour project is taken in both 6-week summer sessions, for a total of six semester hours. May be repeated to a maximum of nine semester hours.

ECO 5973Lr. Economics Analysis: Solving and Communication a Consulting Project (3). Prerequisites: ECO 5114, ECO 5117, ECO 5206, ECO 5208, ECO 5420, and ECO 5434. Corequisite: ECO 5973. This course is a companion course to the Applied Project (ECO 5973) for students in the MS in Applied Economics degree. The course focuses on how to analyze and solve consulting projects. In addition, students discuss how to effectively communicate results to clients. The course also helps students to quickly adapt to the life of an economist in private, state or federal organizations. May be repeated to a maximum of nine semester hours.

ECO 6176. Topics in Behavioral Economics (3). Prerequisites: ECO 5115 and ECO 5116. This course is an overview of behavioral economics using both empirical and theoretical contributions from economics and psychology. The course aims to identify alternative assumptions, in line with observed choice patterns, for use in mainstream economic theory.

ECO 6209. Topics in Macroeconomics (3). This course surveys recent developments in macroeconomic theory with an emphasis on developing research skills in an applied context. Topics include endogenous growth, economic convergence and technological diffusion across countries, money and growth, and modern business cycle theory.

ECO 6216. Monetary Theory and Policy (3). Prerequisite: ECO 5204. This course builds the skills needed to perform research in monetary economics and to survey recent literature in the area. The role of the money market in the macroeconomy and the policy tools, policy objectives, and history of the Federal Reserve are also emphasized.

ECO 6296. Open Economy Macroeconomics (3). Prerequisites: ECO 5116, ECO 5207, and ECO 5423. This is an advanced PhD course on open economy macroeconomics and finance. Canonical models of open-economy are explored, including the real business cycle model and sticky price models.

ECO 6936. Topics in Microeconomics (3). Prerequisites: ECO 5115, ECO 5116, or instructor permission. This course discusses competitive general equilibrium (theory and applications); fundamental results of welfare economics; market failure (externalities and public goods); game and decision theory; the economics of uncertainty (theory and applications).

ECO 6938r. Doctoral Workshop (0-3). (S/U grade only). This course consists of informal seminars and colloquia for critical review of research work in progress and advanced research topics, presented by doctoral students, faculty, and visitors. Registration for credit requires departmental approval. May be repeated without limit.

ECO 6939r. Teaching Workshop (0-3). (S/U grade only). This course consists of informal seminars and colloquia on topics and issues related to teaching economics at the college level, presented by doctoral students, faculty, and visitors. May be repeated to a maximum of six semester hours.

ECO 6960r. Preliminary Examination Preparation (0-12). (S/U grade only). Prerequisites: ECO 5115, ECO 5116, ECO 5204, and ECO 5207. This course is open to students who have completed the core PhD theory courses and are engaged in intensive study for their PhD preliminary examinations.

ECO 6980r. Dissertation (1-24). (S/U grade only).

ECO 8969r. Preliminary Doctoral Examination (0). (P/F grade only.)

ECO 8976r. Master's Thesis Defense (0). (P/F grade only.)

ECO 8985r. Dissertation Defense (0). (P/F grade only.)

ECP 5115. Seminar in the Economics of Population (3). This course examines theoretical and empirical treatment of the determinants of demographic behavior in less and more developed nations, the economic consequences of the behavior, and implications of both sets of findings for population and economics policy.

ECP 5117. Mathematical Demography (3). This course is an introduction to the central analytical techniques of modern population study. Analysis including stable population theory and indirect estimation, continuous and discrete time formulations are considered; generalizations of the standard model with fixed mortality and fertility are also examined. Parametric models of fertility, mortality, stable populations, and the curve-fitting techniques underlying these approaches are reviewed.

ECP 5118. Population Data (3). This course is an introduction to fundamental demographic data, measures, and methods. This required first-semester course for Master's students in Demography introduces basic vocabulary, standard methodology, and standard data repositories used by applied and academic demographers. Lectures and problem sets require students to practice on realistic applications using current demographic data.

ECP 5205. Labor Markets (3). This course covers the following primary topics: the determinants of labor demand and supply, wage differentials, human capital, the operation of labor markets, labor mobility, and the dynamics of labor markets.

ECP 5405. Industrial Organization (3). Prerequisites: ECO 5115 and ECO 5116. This course focuses on the effect of industrial structure and the conduct of firms upon the economic performance and efficiency of the economy.

ECP 5415. Social Control of Business (3). This course focuses on the role of the state in establishing the framework of the market economy; including enforced competition, regulated industries, and nationalized industries.

ECP 5456. Law and Economics (3). This course immerses students in the literature on "law and economics" including the seminal contributions to this field. The differences between the most important "schools" of thought (approaches to the analysis of law and economics) are examined in the process of an exploration of the economic analysis of property law, contract law, tort law, and criminal law. The impact of economic incentives and objectives is explored, as well as objectives on the procedures of each on economic behavior. Students also engage in research by applying an economic approach to study and write about an issue in law or legal processes.

ECP 5536. Economics of Health (3). Prerequisites: ECO 2013 and ECO 2023; or instructor permission. This course is an introduction to and survey of the economics of health. Intended primarily for graduate students in the health disciplines and in similar disciplines other than economics.

ECP 5537. Applied Health Economics (3). Prerequisite: Graduate standing in Economics or instructor permission. This course is designed to teach students to work with large survey data sets, especially panel data. Upon completion of the course, students have an extensive familiarity with Stata. They should be able to display data visually, tabulate information, and run multivariate panel regressions.

ECP 5538. Health Policy Statistics (3). Prerequisite: Graduate standing. This course introduces students to quantitative research methods and analytical techniques. Upon completion of the course, students should be able to read empirical articles and conduct statistical analyses.

ECP 5606. Urban and Regional Economics (3). Prerequisite: ECO 2023. This course introduces students to the evolution of cities, along with issues with which cities and regions must deal (e.g., sprawl, pollution, congestion, transportation, poverty, housing and neighborhood development, public finance) to be examined from an economic perspective. The content lays the foundation for an analysis of policy alternatives to deal with these issues.

ECP 6105. Personnel Economics (3). This course applies the tools of modern economics (e.g., game theory, econometrics, lab and field experiments) to the traditional topics of human resource management. Topics cover the design of optimal incentive mechanisms, but also norms, teamwork, and peer relationships at the workplace.

ECP 6209. Labor Policy and Analysis (3). This course examines the theoretical and empirical research literature related to labor policy. In particular, students examine theoretical and empirical issues related to the wage and employment effects.

ECS 5015. Economic Development: Theory and Problems (3). This course discusses the overall determinants of pace and structure of development, and specific issues, e.g., industrialization, human resources, foreign sector, income distribution, rural development, technology, etc.

ECONOMIC PROBLEMS AND POLICY:
see Economics

ECONOMIC SYSTEMS AND DEVELOPMENT:
see Economics; *General Bulletin*: Latin American and Caribbean Studies

EDUCATIONAL ADMINISTRATION/LEADERSHIP:
see Educational Leadership and Policy Studies

Graduate Department of EDUCATIONAL LEADERSHIP AND POLICY STUDIES

COLLEGE OF EDUCATION

Website: <http://education.fsu.edu/>

Chair: Motoko Akiba; **Professors:** Akiba, Herrington, Hu, Milligan, Schwartz; **Associate Professors:** Bertrand Jones, Boyle, Cox, Guthrie, Iatarola, Khurshid, Mokher, Park, Perez-Felkner, Rutledge, Zuilkowski; **Assistant Professors:** Beatty, Preston; **Teaching Faculty:** Lorensen, Schrader, Watkins; **Research Associate:** Ramos; **Faculty Emeriti:** Beckham, Bender, Dalton, Easton, Funk, Irvin, Jahns, Kannwischer, Kunkel, Lick, Mann, Milton, Schroeder, Shargel, Stakenas, Thomas

The department affirms and strives to fulfill the mission of Florida State University and the College of Education by providing for advanced professional preparation and continuing development of persons who are committed to leadership, policy analysis, and institutional improvement at all levels of education. The department builds educational programs on the foundation of the sociological, anthropological, historical, philosophical, political, and economic perspectives that shape theory and inform practice in education. Using these understandings as a foundation, each student's program of study will include courses and practical experiences that enhance skills in the theory and practice of educational leadership and policy in PK-20 settings. Coursework in our programs develops the inquiry skills needed for structuring and advancing knowledge and informing practice in the field of education. Concomitantly, emphasis is given to the analysis and criticism of educational policy and practice in both international and domestic settings.

The department governs itself and conducts its professional work in accordance with the ideals of a democratic community. It respects human diversity, the ethical foundations of democratic leadership, and the knowledge base for professional practice shared by high-performing educational leaders. It is committed to advancing the theories and practices of policy and leadership in the field of education, both domestic and international. This is achieved through the research, service, and teaching roles of its faculty and through the maintenance of an environment in which students and faculty cooperatively and collegially contribute to scholarship and the application of knowledge to the improvement of education.

The department offers graduate degree programs in educational leadership and policy, foundations of education, and higher education as described in the sections that follow. In addition, the department offers graduate certificates in Institutional Research and Program Evaluation, as well as an undergraduate certificate in Leadership Studies.

Admission Requirements

An application for admission, application fee, official transcript from each college attended, and an official transcript of Graduate Record Examinations (GRE) scores should be submitted with the University application, available at <https://admissions.fsu.edu/gradapp/>. Foreign nationals whose native language is not English must present a minimum score of 550 on the paper-based TOEFL examination or a score of 80 on the Internet-based version. Students should visit <http://education.fsu.edu/admissions/graduate-admissions> for specific admission information for each program.

Educational Leadership and Policy

Two majors are offered within Educational Leadership and Policy degree program: (1) Educational Leadership/Administration and (2) Educational Policy and Evaluation.

Educational Leadership/Administration

Web Page: <http://education.fsu.edu/degrees-and-programs/educational-leadership-administration>

The major in Educational Leadership/Administration offers a master's, a specialist, and two doctoral programs of study focusing on one central goal: to develop and enhance dynamic, high-performing leadership for the renewal and improvement of schools and school systems. The master's and specialist programs are distance learning (online) degree programs that prepare students for entry-level administrative positions in schools, school districts, and educational agencies, while the doctoral programs are face-to-face on campus and provide much more advanced study opportunities geared toward higher-level administrative roles. The two doctoral programs are differentiated by their purposes. The Doctor in Education (EdD) major is designed for the professional practitioner, while the Doctor in Philosophy (PhD) is intended for those wishing to enter academic research roles. The EdD may be pursued online. An online EdD in Educational Leadership and Policy was begun in 2015.

A separate program offered through educational leadership, the modified program for education leadership (Level I), allows students to partially fulfill state Department of Education requirements for Educational Leadership Certification in the State of Florida. Available through FSU's distance learning (online) program, it operates much like a degree-seeking program but has been modified specifically for the purpose of Level I preparation. Applicants must possess an earned master's degree, licensure as a professional educator, and two years of experience. Information is available at <http://education.fsu.edu/degrees-and-programs/educational-leadership-administration-certificate>.

Education Policy and Evaluation

Web Page: <https://education.fsu.edu/degrees-and-programs/education-policy-and-evaluation>

The major in Education Policy and Evaluation offers a master's and a doctoral program aimed at preparing individuals for policy-related careers that involve designing, developing, implementing, analyzing, and evaluating federal, state, and local educational policies. The doctoral program can also prepare students to conduct research and teach at the university level. The program incorporates a core of policy and evaluation courses with classes in the social sciences and basic research methods. At the doctoral level, students are required to complete a strong core of courses in advanced research methods in addition to policy and evaluation courses. The master's degree in education policy and evaluation is designed to prepare individuals for a broad array of career opportunities in policy analysis, legislative affairs, and program evaluation.

The Certificate in Program Evaluation provides training in the basic concepts and skills necessary to conduct formative and summative evaluations of educational or social service programs and program improvement efforts.

Foundations of Education

Two majors are offered within Foundations of Education degree program: History and Philosophy of Education and International and Multicultural Education.

History and Philosophy of Education

Web Page: <http://education.fsu.edu/degrees-and-programs/history-and-philosophy-of-education>

The major in History and Philosophy of Education emphasizes the examination of educational issues from the disciplinary perspectives of history and philosophy at the master's and doctoral degree levels. Students are expected to acquire skills in research methods in history or philosophy, participate in inquiry and debate on policy issues in education, and complement their work within the program with courses in the cognate disciplines in the College of Arts and Sciences and the College of Social Sciences and Public Policy. Graduates of the program often enter teaching and research positions in history or philosophy of education, and many pursue policy-making or administrative positions in schools, governmental agencies, and other organizations.

International and Multicultural Education

Web Page: <http://education.fsu.edu/degrees-and-programs/international-and-multicultural-education>

The International and Multicultural Education major prepares students for professional, administrative, research, and teaching roles in the fields of international and multicultural education, both in the United States and overseas. Particular attention is given to the role of educational programs in achieving socio-economic development in Asia, Africa, and Latin America and in promoting socio-cultural equity and diversity in industrialized nations like the United States. The master's degree is professionally oriented and provides a solid grounding in the practice of international and multicultural education, along with disciplinary perspectives and technical skills in evaluation, action research, and planning. The doctoral degree offers a more extended program of study culminating in the dissertation and leading to high levels of investigative and analytic competence appropriate for future academics, policy-makers, and researchers. Faculty, alumni, and students are active in educational development, research, and planning around the world. Graduates of the program are found in numerous positions including academic research and teaching, educational planning, project design and evaluation, program management in foundations, non-governmental organizations, governmental organizations, as well as private and public educational institutions.

The International and Multicultural Education program also offers a master's degree in partnership with the Peace Corps, the Peace Corps Master's International, with a focus in teaching math, science, or English as a Second Language. Students combine their graduate coursework with a twenty-sev-

en month commitment with the Peace Corps. Applicants must complete the Peace Corps application separately from the International and Multicultural Education application.

Higher Education

Web Page: <http://education.fsu.edu/degrees-and-programs/higher-education>

A national leader in the field, the program in Higher Education offers study at the master's and doctoral levels, as well as a graduate certificate program in Institutional Research. The Master of Science (M.S.) degree in Higher Education offers an emphasis in Student Affairs. The MS program is designed to prepare professionals for entry-level administrative, management, and leadership positions in higher education. The program also offers both Doctor in Education (EdD) and Doctor in Philosophy (PhD) programs in which students gain advanced knowledge and competency in utilizing analytical skills. The EdD program of study focuses on knowledge and skills associated with the practice of management and administration of postsecondary institutions. The PhD program provides these skills and understandings as well as in-depth study of research design and methodology. The online Certificate Program in Institutional Research is offered to master's and doctoral students who wish to gain more specialized knowledge in institutional research.

Definition of Prefixes

CGS—Computer General Studies

ECT—Education: Career/Technical

EDA—Educational: Administration

EDF—Education: Foundations and Policy Studies

EDG—Education: General

EDH—Education: Higher

EME—Education: Technology and Media

MHS—Mental Health Services

SDS—Student Development Services

Graduate Courses

CGS 5310. Technology in Schools for Educational Leaders (3). This course offers opportunities for modern educational leaders and those interested in reforming K-12 education to enhance learning, teaching, and assessment with technology, and promote and model effective communication and collaboration among stakeholders using digital age tools.

EDA 5069. Ethics in Educational Leadership (3). This course examines educational leadership as an ethical endeavor; covers the assumptions, values, and beliefs that inform school practice and policies. Discusses systemic constraints to educational leadership, and also covers social-justice concerns in education.

EDA 5107. Educational Leadership and Change (3). This course is designed to teach aspiring educational leaders how to lead change in an educational setting. Students are exposed to comprehensive tools that are grounded in research that lead to the transformation of schools.

EDA 5191. Leadership for Diversity (3). This course integrates DOE requirements of ESOL Standards for School Administrators with a) an understanding of the Consent Decree, accountability and equity issues related to LEP students; b) an understanding of compliance with federal and state regulations; and c) an understanding of cultural proficiency in the school environment.

EDA 5192. Educational Leadership (3). This course covers basic leadership theories, motivation, group dynamics, planning, and change processes in educational settings. The course emphasizes knowledge, analysis, and applications that draw from multi-disciplinary perspectives, including organizational analysis, psychology, anthropology, and sociology.

EDA 5219. Resource Management for Educational Leaders (3). This course examines public education as an economic institution, emphasizing the relationship between the purposes of schooling and the human and fiscal-resource allocation role of the principal. The principal's role in selected strategies and techniques in critical thinking and problem solving as applied to school improvement are presented. Procedures involved in school funding are examined, as well as the role of the principal in implementing statutes, audits, procedures, and policies. Recruitment, selection, retention of school personnel, and collective bargaining are examined as they relate to state and federal law.

EDA 5231. Applications of Policy (3). This course explores the roots of the educational process, the role of different stakeholders in policy formation and implementation, and applications of these educational policies in schools for the purpose of improving teaching and learning.

EDA 5232. Legal Aspects of Public School Administration (3). This course is designed to enable students to identify and apply legal principles that place limits on authority, define individual and corporate liability and inform standards of educational practice in public school settings. It emphasizes knowledge, analysis, and application that explores a range of leadership competencies, including concept formation, organizational sensitivity, problem solving and decisiveness. The course includes readings offering an overview of key legal and ethical issues for school administrators and case scenarios designed for small group and individual analysis.

EDA 5242. School Finance (3). This course examines public education as an economic institution. The sources and methods of distribution of public school revenue at the various levels of government. The social-economic-political context in which public finance decisions are evolved and their relationship to current educational issues.

EDA 5288. The Politics of Education (3). This course is an introduction to the study of the nation's largest social institution, public education. Using concepts based in the discipline of political science, the course explores how ideologies, institutions, and social groups have interacted to shape formal schooling in the United States. Class discussions and readings focus on the distribution of power and leverage in the political process of American society and the utilization of communication and analytic skills by educational administrators and policy analysts.

EDA 5423. Data Driven School Improvement (3). This course builds expertise in using data for a variety of school-improvement purposes, including instructional decision-making in grades K-12. Collaborative action-research skills are developed to solve school-based problems.

EDA 5501. The Assistant Principal (3). This course provides an overview of research on the position of the K-12 Assistant Principal. The course addresses issues of role ambiguity, socialization, ethics, discipline, instruction, and various aspects of personnel management.

EDA 5503. The Principalship (3). This course provides a systemic approach to leadership and management roles, responsibilities, opportunities, and challenges of school principals.

EDA 5504. Instructional Leadership (3). This course is designed to provide an understanding of the ways that school leaders bring multiple resources such as teachers, parents, the community, programs, professional development, the schedule, and supervision together to focus on curriculum, instruction, and academic achievement.

EDA 5507. Planning Effective Instruction (3). This course explores the components and relationships that make up effective classroom instruction. Working on the assumption that effective classroom instruction is a necessary foundation for student achievement, school leaders need to know how to coach and monitor teachers' use of effective instructional practices.

EDA 5508. Teacher Leadership Development (3). This course is based on the increasingly important role of a school leader in identifying and developing teacher leaders in K-12 schools. School leaders need to be able to work with teacher teams effectively as well as cultivate the talents of teachers as leaders in various aspects of school life. This course explores the dynamics of teacher leadership development in schools today and how school leaders can be prepared to cultivate this important resource.

EDA 5569. State Education Policy (3). This course examines the development of education policy through the state legislature, state boards of education, and the state budgeting process. Emphasizes eclectic research methods in the conduct of limited scope educational policy studies at the state level.

EDA 5906r. Directed Individual Study (1-3). (S/U grade only). May be repeated to a maximum of five semester hours.

EDA 5931r. Special Topics in Educational Administration (1-3). This course content varies to provide opportunity to study current issues in educational administration and topics not offered in other courses. May be repeated as topics vary to a maximum of twelve semester hours.

EDA 5941r. Supervised Teaching (1-4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

EDA 5942. Practical Experiences in Educational Leadership (3). This practicum course's primary purpose is to provide students an experiential orientation into the components for fulfilling certification requirements in Educational Leadership/Administration toward Level I Educational Leadership Certification. The practicum provides the infrastructure that bridges leadership practice with leadership theory as students acquire the skills, knowledge, and dispositions to make a positive impact on improving schools and student achievement.

EDA 5945. Practicum in Educational Leadership I (1). This course integrates Department of Education requirements of experiential learning through field experiences, school-based mentoring from an expert in the field, and the *Florida Leaders* Web site for professional development for aspiring school leaders.

EDA 6061. Educational Administration and Organizational Practice (3). This course provides an introduction to educational administration and organizational practice for graduate students interested in education and policy. The course is composed of a social-systems model of which critical elements such as structure, motivation, culture and politics are covered. Opportunities and constraints for schools are explored along with key administrative processes and contemporary research on the effectiveness of schools.

EDA 6101. Organizational Theory (3). This course is an overview of organizational concepts and theories to enable the advanced graduate student to develop alternative bases for utilizing organizational theory in future study and practice within educational settings.

EDA 6102. Perspectives on Leadership Theory (3). This course examines traditional and non-traditional education leadership theories, including analyses of purposes and meanings inherent in formal and informal perspectives.

EDA 6105. Laboratory of Practice I (3). Prerequisite: EDA 6485. In this course, students return to the "problem of practice" they identified in Professional Learning for Educational Practitioners I, explore their intuitive theories of action on the topic, identify a preliminary research question for their dissertation, and enter their research site to explore the viability of their topic. In addition, students learn about the Instructional Review Board, identify a local mentor, and learn about the different types of dissertations. Finally, they reflect on what is entailed in being a researcher and leader in their research context.

EDA 6108. Laboratory of Practice II (3). This course facilitates students' ability to engender original thinking and research on important educational issues as they relate to issues of human rights and social justice in local and global contexts.

EDA 6207. Leadership for School Renewal (3). This course assists students in developing catalytic leadership for creating a vision description of total quality school/school district and a strategic plan for realizing that vision.

EDA 6425. Literature Review for Educational Research (3). Prerequisite: EDF 6486. This course is designed to guide advanced doctoral students through the research process, including identifying and developing a research interest, refining research questions, and writing a review of the literature.

EDA 6930r. Seminar in Literature, Research and Professional Writing (1-3). This course is a weekly seminar on current educational problems. May be repeated to a maximum of nine semester hours.

EDA 6980r. Dissertation (1-12). (S/U grade only).

EDA 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

EDA 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

EDA 8967r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

EDA 8985r. Dissertation Defense (0). (P/F grade only.)

EDF 5089. Black and Latino Education: History and Policy (3). This course explores factors that have impeded academic achievement at the K-12 and university levels, in addition to examining programs that foster success. This course provides an understanding of the history and socio-economic context of the educational experience of African-Americans and Latinos, the two largest minority groups in the United States.

EDF 5414. Introduction to Large Data Sets (3). This course focuses on identifying, managing, analyzing, and interpreting findings from existing large databases specific to the field of education. Students are introduced to the major existing databases and given the opportunity to analyze these data using Stata, a statistical software package popular in the social sciences.

EDF 5449. Survey Research Methods (3). This course introduces the design, use, and analysis of questionnaires for data collection; significant research questions and strengths and weaknesses of various methodologies are discussed. Hands-on practice in questionnaire design.

EDF 5461. Introduction to Program Evaluation (3). This course is an overview of current evaluation theory and models; emphasis on role evaluation in needs assessment and planning phase of program development.

EDF 5462. Evaluation of New Educational Programs and Practices (3). Prerequisite: EDF 5461. This course is an advanced level seminar on the theoretical and pragmatic aspects of program evaluation. Students begin with an overview and understanding of evaluation theoretical roots and the philosophical premises shaping evaluation theory. This leads to further understandings about the application of different research designs to the practice of evaluation, as presented in evaluation cases.

EDF 5464. Qualitative Research and Evaluation Methods (3). This course develops students' skills in collecting qualitative data for program evaluation. The political context of evaluation and the strategies for ensuring the production of quality work are emphasized. The goals of the course are to provide students with 1) an understanding of theoretical frameworks guiding qualitative research and evaluation, and 2) hands-on experience in the collection and analysis of qualitative data.

EDF 5481. Methods in Educational Research (3). This course is a survey of selected types of educational research and appropriate related techniques; emphasis on criteria of validity.

EDF 5517. History of Education in The United States (3). This course examines the evolution of public and private schooling in the United States from the Spanish and British colonial eras to the modern reform period of the late 20th century. It includes the social history of American teachers, and a critical examination of issues surrounding race, ethnicity, social class and gender in the development of formalized structures of schooling.

EDF 5519. History of Higher Education (3). This course provides an in-depth overview of the history of higher education in the role of higher education in society over the last two centuries, the expansion of higher education in the twentieth century to include various groups such as women, African-Americans, and the working-class; tensions between the traditional, liberal arts curriculum and multicultural offerings; and governmental roles in the transformation of modern higher education.

EDF 5543. Introduction to Philosophy of Education (3). This course is a survey of contemporary approaches to philosophy of education, such as neo-pragmatism, post-structuralism, feminist theory, critical theory, existentialism and analytic philosophy, emphasizing their perspectives on current educational problems and practices and their methods of investigation.

EDF 5548. Philosophy of Teaching and Learning (3). This course introduces the comparative analysis of conceptions of teaching and learning in competing philosophies of education and their implications for education in a culturally diverse democratic society.

EDF 5551. Social Philosophies and Education (3). This course examines social and political philosophies such as liberalism, communitarianism, functionalism, critical theory, pragmatism and feminism and their implications for educational policy and practice in a democratic society.

EDF 5612. Anthropology of Education (3). This course focuses on the applications of anthropology in the study of education. Focuses on transmission of culture; cultural factors that promote and inhibit in-school learning; bilingualism and language policy; factors affecting development and policy in education.

EDF 5624. Economics of Education (3). This course applies basic economic theory and methods to policy issues arising in schools and universities, including both domestic and international settings. Examples of specific issues include the supply and demand for education, the external benefits of education, the labor market for educators, and the effect of market competition on the performance of educational institutions.

EDF 5625. Education and Economic Development (3). This course explores the relationship between education and economic development, especially in the developing world. Students examine theoretical and empirical arguments for human-capital theory, as well as alternative viewpoints challenging the human-capital perspective. Students also evaluate empirical evidence regarding the most effective and efficient educational inputs in developing countries.

EDF 5626. Economic Evaluation of Education Programs (3). This course examines how economics can be used to improve resource decisions made by administrators and policy makers. It provides theory and applications of cost-effectiveness and cost-benefit analysis.

EDF 5630. Sociology of Education (3). This course introduces students to the sociology of education designed for graduate-level students. Examines empirical evidence related to current educational problems and related issues in educational practice and policy.

EDF 5641. Introduction to Policy Studies in Education (3). This course provides an introduction to the concept and practice of policy in the field of education with special focus on the use of social knowledge in policy formation. It highlights policy as a multidisciplinary field of study.

EDF 5649C. Applied Education Policy Analysis (3). Prerequisite: EDF 5400. This applied policy analysis course will build on students' introductory knowledge of basic statistics, economics and education policy. Specifically, this course teaches graduate students how to apply econometric theory to research, policy, and evaluation issues with a focus on P-20 education policy analysis.

EDF 5652. Policy Development in Education (3). This course explores the United States' policymaking process in all its stages including problem identification, agenda setting, policy formation, policy adoption, implementation and evaluation. In so doing, it surveys a broad range of K-12 and postsecondary education policies.

EDF 5656. Design and Management of International Development and Education Projects (3). Prerequisite: EDF 5850. This course takes students hands-on through the process of project design and explores the practical "how to" issues involved in managing projects in international educational development. Course content includes the development of actual proposals for projects by students, including the development of technical narrative and implementation plans, monitoring and evaluation plans, staffing and management sections, organizational capacity statements and budgets.

EDF 5706. Gender and Education in Comparative Perspective (3). This course explores the relevance of gender to various aspects of education, including formal, nonformal, and informal education. Research and issues from various regions of the world are included for analysis. Students develop their ability to analyze gender in educational settings and to incorporate gender analysis into educational planning in a variety of contexts.

EDF 5743. Foundations of Education (3). This course provides an overview of the social, cultural, philosophical, political, historical, and economic foundations of education. It examines the relationship between schools and the society in which they exist. Students examine the influences of culture, history, and economy on educational beliefs, policies, and practices.

EDF 5850. International Development Education (3). This course is an overview of the roles of education in national development and in promoting social, economic, and cultural improvement. Emphasis given to less developed countries and "Third World" communities at home.

EDF 5853. Comparative Education (3). This course examines what may be learned from comparisons of educational policy and practice among different countries and cultures around the world and how to go about comparative education research most effectively. Objectives are that students discover what may be learned from comparison of teaching, learning, and educational administration in different settings and practice good methods of comparative research.

EDF 5887. Multicultural Education (3). Prerequisite: Graduate standing. This course offers an introduction to the history and philosophy of educational policies and practices that respond to the realities of cultural diversity in the United States and abroad.

EDF 5890. Sociology of Nontraditional Approaches and Innovation in Education and Development (3). This course critically reviews theories and research on the role of educational innovation in the development process.

EDF 5907r. Directed Individual Study (1-3). (S/U grade only). Course topics may vary. May be repeated to a maximum of nine (9) credit hours; repeatable within the same term.

EDF 5911r. Supervised Research (1-4). (S/U grade only). May be repeated to a maximum of five semester hours.

EDF 5935r. Special Topics in Foundations of Education (1-3). This course offers topics not covered in regular courses; e.g., advanced quantitative research, Black and Latino education, economics and education, religion and diversity in public education, school choice policy issues, and urban educational policy. Offered on a student demand basis. Topics deal with policy and research issues in the foundations of education. May be repeated to a maximum of twelve semester hours.

EDF 5941. Institutional Research Practicum (1-8). (S/U grade only). Prerequisite: EDH 5055. This course is the capstone course for the Certificate in Institutional Research. In this course, students use theory and knowledge from previous courses in the Certificate Program to address a practical issue or problem in Institutional Research.

EDF 5974r. Thesis (3-6). (S/U grade only). A minimum of six semester hours is required.

EDF 6471. Quasi-Experimental Data Analysis (3). This advanced course prepares students to conduct quasi-experimental methods appropriate for education policy analysis.

EDF 6474. Foundations of Practice Models (3). Prerequisite: EDF 6485. This course introduces students to different Dissertation-in-Practice research models that are applicable for investigating a problem of practice situated within an educational organization.

EDF 6475. Qualitative Methods in Educational Research (3). Prerequisite: EDF 5481. This course is an introduction to methods of data collection: qualitative, participant observation, and ethnographic interviews. Attention to strengths and shortcomings for use in educational research and evaluation.

EDF 6476. Advanced Qualitative Research Seminar (3). Prerequisite: EDF 5464 or EDF 6475. This course explores the theoretical and pragmatic aspects of qualitative research. It is intended for students who already have a foundation in qualitative methods and are planning to use this methodological approach in their dissertation research. Students develop a "conference-ready" research paper that draws on a set of existing qualitative data and different theoretical perspectives.

EDF 6479. Qualitative Data Analysis (3). Prerequisite: EDF 5464 or EDF 6475. This course focuses on the analysis, interpretation and reporting of qualitative data collected during interpretive research.

EDF 6480. Applied Quantitative Methods for Educational Practitioners (3). This course focuses on applied statistics in the social sciences and how to use these tools to construct research reports specific to education. The goal of the course is for students to be more comfortable working with applied statistics and begin to apply the skills acquired to their own research.

EDF 6485. Professional Learning for Educational Practitioners I (3). This course develops student's identities as scholarly practitioners through identifying individual research interests and preparing participants for continued studying applied education research.

EDF 6486. Applied Research Methods in Educational Leadership and Policy (3). This course introduces students to the role that educational and empirical research, in particular, can play in solving educational problems.

EDF 6493. Professional Learning for Educational Practitioners II (3). Prerequisites: EDA 6105 and EDF 6485. This course introduces students the critical components of practice-based research in the formats of program evaluation, action research, and policy analysis.

EDF 6547. Philosophical Foundations of Education Research (3). Prerequisite: Graduate standing. This course provides a historical and philosophical survey of educational research emphasizing the epistemological and ontological assumptions underlying different theories of and approaches to contemporary educational inquiry.

EDF 6558. Seminar on John Dewey's Educational Philosophy (3). This course is an advanced seminar providing coverage of Dewey's educational thought. Studies Dewey in the context of American pragmatism and educational progressivism.

EDF 6576. Policy to Practice: District, School, and Classroom Policy Implementation (3). This course focuses on the implementation of educational policy at the district, school, and classroom levels. The course covers the central theories that have been used to understand the goals and mechanisms of different state and federal policy efforts aimed at improving schools and schooling; reviews research on how districts, schools, and teachers in classrooms respond to state and federal policies; and also covers three different "cases" representing dominant trends in educational policy, providing a multi-level perspective on how state and federal policies shape district, school, and classroom practices.

EDF 6629r. Advanced Seminar: Selected Topics in Education and Economic Development (3). Prerequisite: EDF 5625. This course is an analysis of selected topics and policy issues related to education and economic development. May be repeated to a maximum of six semester hours.

EDF 6648. Policy Analysis in Education (3). Prerequisite: EDF 5641. This course provides a comprehensive study of the policy analysis process. It illuminates and clarifies theoretical concepts in policy analysis through the discussion of cases and issues pertinent to the field of education.

EDF 6666. Teacher Policy and Reform (3). This course introduces teacher policy and reform topics based on theoretical and empirical literature in the U.S. and global contexts. The roles and influences of policy actors at global, national, sub-national (state/province), and local levels are discussed, and policy assumptions, contexts, designs, implementations, and outcomes are examined.

EDF 6945r. Internship in Educational Policy (1-9). (S/U grade only). Prerequisite: EDF 5652. This course is a supervised internship to provide students with experience in educational policy analysis and formation. May be repeated to a maximum of eighteen semester hours.

EDF 6960. Diagnostic Examination (0). (P/F grade only.) This diagnostic exam appraises the student's ability to pursue the doctoral degree and to facilitate advising in the development of the student's program of studies. The diagnostic exam is taken during the second semester or after a doctoral student has completed nine to twelve hours of coursework.

EDF 6981r. Dissertation (1-12). (S/U grade only).

EDF 8965r. Preliminary Doctoral Examination (0). (P/F grade only.)

EDF 8967r. Master's Comprehensive Examination (0). (P/F grade only.)

EDF 8970r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

EDF 8977r. Master's Thesis Defense (0). (P/F grade only.)

EDF 8987r. Dissertation Defense (0). (P/F grade only.)

EDG 5250. Curriculum and Instruction for School Leaders. (3). This course provides the student with an in-depth view of curriculum and instruction as well as a knowledge base for planning, designing, organizing, and implementing an effective instructional program.

EDH 5005. Sociology of Higher Education (3). This seminar course covers higher education at multiple levels.

EDH 5041. Intentional Interventions (3). This course is designed to explore techniques and resources available to support and assist higher education and student affairs practitioners in counseling and advising individuals and groups in contemporary colleges and universities.

EDH 5042. Student Success In College (3). This course examines the theories and research on student success and explores effective policies, programs, and practices that can be adopted to promote student success in higher education.

EDH 5045. Student Development Theories for College Student Personnel Work (3). This course discusses young adult development tasks, college student and adult development theory, and application of theories by student affairs and higher education professionals.

EDH 5046. Diversity in Higher Education (3). This course is designed to examine historical and contemporary diversity-related issues in higher education. Students explore racial development theories and examine controversies in policy and practice across three major areas in higher education: campus climate, outcomes, and curriculum. Additionally, students increase their knowledge, awareness, and skills related to working with diverse populations.

EDH 5051. Higher Education in America: Basic Understandings (3). This course examines the history, philosophy, policies, practices, and problems of America's community colleges, senior colleges, and universities.

EDH 5054. The American Community College: History and Development (3). This course is designed to introduce students to the philosophy and historical evolution of the American Community College. The focus is on the social, economic, political, and educational forces that influence the community college, as well as the programs, services, and current issues.

EDH 5055. Introduction to Institutional Research (3). This course provides an introduction to institutional research as discipline in higher education. Course content is addressed within the context of organizational, administrative, political and ethical issues in institutional research. Practical experience with research databases and insights from current practitioners in the field are integrated into the course content.

EDH 5068. Outcomes of Undergraduate Education (3). This course develops a historical and theoretical foundation for conceptualizing outcomes of undergraduate education. The course considers theoretical, technical, and policy issues in the assessment of these outcomes.

EDH 5078. Outcomes Assessment in Higher Education I: Study Design (3). This course prepares students to assess and evaluate postsecondary education outcomes. Students learn to define and identify specific outcomes of higher education, both inside and outside of the classroom. Outcomes related to students, faculty, student services, institutions, and state and federal policy issues are discussed and evaluated in the course.

EDH 5079. Outcomes Assessment in Higher Education II: Analysis & Dissemination (3). Prerequisite: EDH 5078. This course trains higher education professionals primarily undertaking research in the form of assessment. The course places attention on applications of educational research and assessment within the context of the practice of higher education administration.

EDH 5095. Strategic Planning and Performance Improvement in Higher Education (3). This course introduces students to strategic management and performance improvement through strategic planning in the higher education/public sector settings. Students develop knowledge about the theory behind and history of strategic planning, current issues in strategic management in the higher education setting, and survey different strategic planning and performance models currently used on college campuses. Students also learn and practice strategic planning and performance improvement techniques.

EDH 5305. College Teaching: Instruction in Higher Education (3). This course examines classroom and individualized instruction including objectives-oriented instruction, evaluation, student motivation, and media utilization in the college curriculum.

EDH 5362. Leadership Teaching and Learning in Higher Education (3). Leadership education is an integral part of student development. Higher Education administrators are often asked to develop co-curricular and curricular programs to develop future leaders. Theory-to-practice guides this course where students are introduced to leadership theory and pedagogical practices for leadership education and leadership learning.

EDH 5405. Legal Aspects of Higher Education (3). This course is a comprehensive analysis of legal concepts, procedures, and considerations relevant to higher education.

EDH 5406. Ethical Leadership in Higher Education (3). This course allows students to build on and integrate moral reasoning skills with professional leadership skills by analyzing ethical problems in situated contexts that future higher education policy makers and administrators often face. Central to this course is the acquisition of skills and knowledge that allows for (1) introspective and reflective examination of the relationship between moral values, beliefs and decision making; (2) critical application of professional expertise and moral judgment in situated practice; and (3) identification of ways theoretical frameworks, leadership models and practice, and educational policies help to frame the role of higher education as contributor to the public good.

EDH 5504. College and University Institutional Advancement (3). This course provides an overview of comprehensive institutional advancement including planning, institutional relations, educational fund-raising, alumni, government relations, foundations, and corporate relations.

EDH 5506. College and University Business Administration (3). This course addresses the enterprise of college and university business administration in the United States and the roles and responsibilities it plays in the overall higher educational process. Students are introduced to emerging trends and challenges faced by practitioners and also gain an understanding of how finance and business administration departments affect different consistency groups on and off campus. Departments explored include Police, Information Technology, Human Resources, Contracts and Grants, Facilities, Environmental Health and Safety, Purchasing and Auxiliary Enterprises.

EDH 5507. College and University Budgeting (3). This course facilitates development of the knowledge and skills needed to become a constructive participant in a college or university budgeting process. Students are exposed to representative institutional budgets and budgetary processes, the budget's role in policy making, the broader economic and political context of budgeting, the role of institutional culture in the budgeting process, and budgetary planning for reallocation and retrenchment.

EDH 5630. Capstone in Higher Education (3). This course analyzes the development and operation of programs and projects at the unit level in American higher education. Particular attention is given to the financial and planning aspects of program management.

EDH 5632. College and University Presidency (3). This course allows participants to examine the role of the college and university president by addressing this complex leadership role from a variety of perspectives. Case studies, theoretical constructs, and empirical research are surveyed to discover key themes and unique characteristics of institutional presidents in a range of postsecondary institutional forms and organizational cultures. The instructor's goal is to facilitate understanding of the role and responsibilities of the college and university president, the structures and processes that influence and are influenced by the institutional president, and the diversity of stakeholders to which the president is linked.

EDH 5639. Management in Higher Education (3). This course provides theoretical grounding in management and link theory to practice and introduces students to performance competencies related to essential management skills in organizing, planning, and understanding their work environment. Students have an opportunity to utilize management tools and techniques for decision making, structuring and coordinating work groups, and for implementing change in higher-education organizations.

EDH 5645. Data Driven Decision Making for Institutional Researchers (3). This course provides an introduction to the theoretical and practical application of data-driven decision making for institutional researchers. This course focuses on how to collect, analyze, review, and present data and information to decision makers.

EDH 5646. Data Mining (3). This course introduces the basic theories and practice of data mining, a process which allows for large amounts of data to be analyzed in a sequential, logical process.

EDH 5647. Data Analysis for Institutional Research (3). Prerequisite: EDF 5400. This course focuses on key functions in Excel and SPSS for an IR office. In particular, students learn pivot tables, t-tests, regression, and commonly used formulas in Excel. Assignments are in Excel and replicated on SPSS so that students could perform the analysis in either software. Using institutional research data from IPEDS or other data sources, students learn how to complete and interpret an analysis that is appropriate for an IR office and campus stakeholders. Access to SPSS is required and is the student's responsibility. A prerequisite to this course is a basic understanding of statistics as statistics is not taught.

EDH 5664. Politics of Higher Education (3). This course introduces students to the systematic study of the relationship between political actors, institutions, and processes and higher education policy outcomes in the American political system, with special emphasis on the American states—an area of emerging interest to many social scientists. Likewise, students are introduced to some of the major policy issues and problems facing state and federal governments. A primary purpose of the course is to help students develop the capacity to conduct independent scholarship on public policy, politics and higher education policy.

EDH 5906r. Directed Individual Study (1–3). (S/U grade only). Course topics may vary. May be repeated to a maximum of nine (9) credit hours; repeatable within the same term.

EDH 5915r. Supervised Research (1–4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

EDH 5931r. Special Topics in Higher Education (1–3). In this course, content varies to provide opportunity to study current issues in higher education and topics not offered in other courses. May be repeated as topics vary to a maximum of twelve (12) credits; repeatable within same term.

EDH 5941r. Field Laboratory Internship (1–8). May be repeated to a maximum of twelve semester hours.

EDH 5942r. Internship (1–8). (S/U grade only). May be repeated to a maximum of twelve semester hours. Doctoral candidates.

EDH 5943r. Supervised Teaching (1–4). (S/U grade only). This course is designed to provide an opportunity for graduate students to engage in experimental teaching situations under the guidance of a faculty member. May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

EDH 5944r. Internship (1–8). (S/U grade only). Prerequisite: Master's candidacy. May be repeated to a maximum of twenty-four semester hours.

EDH 5946. Internship in College and Community College Teaching (3). Prerequisite: Approval of area in which internship is to be completed. Supervised teaching in lower-division college courses.

EDH 5971r. Master's Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

EDH 5973r. Specialist in Education Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

EDH 6040. Research on College Students (3). This course is designed to cover major areas related to the research on college students and discuss the challenges in conducting such types of research. The first part of the course reviews the major theories and conceptual frameworks related to college students, from transition to, experience in, and outcomes of college. The second part discusses methodological issues and other challenges in conducting research on college students.

EDH 6059r. Proseminar in Higher Education and Education Policy (0). (S/U grade only). This proseminar is designed to address key aspects of the doctoral curriculum and advising issues including the selection of an advisor, the doctoral committee, programs of study, the need for Scholarly Engagement for doctoral students, and the transition points in the doctoral process, e.g. courses to take, research requirements, the proposal defense, dissertation defense, and graduation.

EDH 6064. Women in Higher Education: A Historical Perspective (3). This seminar course explores the role and activities of women in American higher education, beginning in the 1800's. It begins with an exploration of women's exclusion from higher education and the gradual inclusion of women over time. Viewing the role of women in higher education from a historical perspective brings to light new ways of thinking about colleges and universities as well as new ways to think about women.

EDH 6067. International Perspectives in Higher Education (3). This course introduces learners to the international and comparative dimensions of higher education. Various topics covered in this course include comparison of higher education systems and the historical roots of the similarities and differences; comparison of the major participants in higher education across nations, with a special focus on the academic professoriate and college students; exchange of people and ideas in the global age; and salient policy issues in higher education from a global perspective, such as access and finance, accountability and quality assurance, and the emergence of entrepreneurial universities.

EDH 6081. Leadership and Change in Higher Education (3). Prerequisites: EDH 5051 and EDH 6635. In this course, students are introduced to current problems and future opportunities for higher education and develop competencies as higher education leaders, researchers, and practitioners in order to lead higher education in the future. Particular emphasis is placed on the application of change strategies and organizational transformation. Students are introduced to collaborative approaches through the application of synergy, learning teams, and learning communities.

EDH 6085. Social Justice in Higher Education (3). This course explores issues surrounding various social identities, examines epistemologies that attempt to explain the role these identities play in higher education settings, and critically analyzes previous and existing higher education policy and practice to greater understand the influence of social justice, diversity, and multiculturalism on higher education.

EDH 6401. Public Policy in Higher Education (3). Prerequisite: EDH 5051. This course gives graduate students a greater understanding of the process of public policy-making and the impact of public policy on higher education. Topics include the interaction between the states and the federal government and the interconnections between K–12 and higher education.

EDH 6505. Finance in Higher Education (3). Prerequisite: EDH 5051. This seminar examines major issues in the financing of higher education in the United States, including major policy issues in higher education finance; the roles of the federal government and states; and institutional budgeting and financial management.

EDH 6635. Organization and Governance of Higher Education (3). Prerequisite: EDH 5051. This course, through case studies, contemporary research, and concepts drawn from the literature of organizational theory, introduces students to management and leadership in higher education and theoretical models applicable to these institutions. Students examine the organizational structure and culture of higher education and the functional attributes of administrative roles, processes of decision making and models of governance and policy-making internal and external to colleges and universities.

EDH 6935r. Seminar: Literature, Research, and Professional Writing in Higher Education (3). (S/U grade only). This course is the capstone for the doctoral research sequence. The focus of the course is on issues related to the development and refinement of the doctoral dissertation prospectus, including problem statement, literature review, and research design and method. May be repeated to a maximum of six semester hours.

EDH 6936. Seminar in Student Development Theories (3). This course gives doctoral students an opportunity to examine leading theories of college student development and the research literature supporting these theories. Students develop the ability to critique and evaluate student development theories and apply theory in higher education settings.

EDH 6980r. Dissertation (1–12). (S/U grade only).

EDH 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

EDH 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

EDH 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

EDH 8976r. Master's Thesis Defense (0). (P/F grade only.)

EDH 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

EDH 8985r. Dissertation Defense (0). (P/F grade only.)

MHS 6938r. Special Topics in Counseling Psychology (3). This course is an in-depth investigation of a variety of topics in counseling psychology with different topics offered each year. May be repeated to a maximum of nine (9) credit hours; repeatable within the same term.

SDS 5040. Student Personnel Work in Higher Education (3). This course is a review of current policies and practices of selected areas of student personnel and selected administration.

SDS 5624. The American College Student (3). This course is a developmental study of the contemporary college student and the campus climate.

SDS 5804. Practicum in Student Personnel Work (3). This course provides opportunity for supervised practical experience in college student personnel work.

Graduate Department of EDUCATIONAL PSYCHOLOGY AND LEARNING SYSTEMS

COLLEGE OF EDUCATION

Website: <http://education.fsu.edu/>

Chair: James Klein; **Professors:** Becker, Dennen, Ebener, Eklund, Ke, Klein, Phillips, Shute, Yang; **Associate Professors:** Almond, Dong, Eccles, Hines, Jeong, Osborn, Paek, Phillips, Roehrig, Swanbrow Becker, Turner; **Assistant Professors:** Chow, Jenkins, Krach, Marks, Yoon, Zhang; **Teaching Faculty:** Dozier, Hyatt, May, Thompson; **Professors Emeriti:** Branson, Briggs, Burkman, Driscoll, Gagne, Kaufman, Keller, Kelly, Morgan, Oosterhof, Pargman, Peterson, Pfeiffer, Prevatt, Reardon, Reiser, Sampson, Tate, Tenenbaum, Wager

The Department of Educational Psychology and Learning Systems is committed to improving human learning and performance in a variety of settings, including schools, universities, and adult learning contexts such as government agencies, business, human services, and industry. Specifically, the department seeks to provide service to the college; prepare graduates for leadership roles in universities, school districts, state departments of education, educational research organizations, human service agencies, and private industry; and conduct research designed to expand the knowledge base of our field and improve the quality of education and training.

The following degrees, majors, and certificate programs are offered by the Department of Educational Psychology and Learning Systems:

Educational Psychology

Learning and Cognition M, S, D

Sport Psychology M, D

Instructional Systems and Learning Technologies

Instructional Systems and Learning Technologies M, S, D

Learning Design and Performance Technology D

Measurement and Statistics M, S, D

Counseling Psychology and Human Systems

Combined Program in Counseling Psychology and School Psychology D

Counseling and Human Systems

Career Counseling M/S

Mental Health Counseling M/S

School Counseling M/S

School Psychology M/S

Certificate in Human Performance Technology

Certificate in Measurement and Statistics

Certificate in Online Instructional Development

Certificate in Online Teaching and Learning

Educational Psychology

Website: <https://education.fsu.edu/degrees-and-programs/learning-and-cognition>

The program offers master's and doctoral degrees in two major areas: Learning and Cognition, and Sport Psychology.

The major in **Learning and Cognition** is theory- and research-oriented at both the master's and doctoral levels. The major includes coursework in cognition, learning theory, research methods, and an emphasis on educational applications. Graduates of this major are prepared to take positions in universities, educational agencies, research organizations, and private enterprises that focus on improving educational practice. The thesis-track master's, which is recommended for those interested in pursuing doctoral studies, is only available for face-to-face students. Online distance master's students complete the comprehensive-exam track.

The major in **Sport Psychology** provides the basis for understanding and influencing the behavior of people involved in sport, exercise, and other types of physical activity. Graduates with this major are prepared to take positions in college and university settings or sport and exercise settings as teachers, researchers, and performance enhancement consultants for athletes and coaches.

Admission Requirements

For all programs, applicants must provide transcripts, a letter of intent indicating career goals and expectations, and three recent letters of recommendation. Letters should be from former teachers/professors or other persons

qualified to make predictive statements regarding the applicant's probable success in graduate studies, personal and work characteristics, intellectual ability, and/or scholarly attainments.

Learning and Cognition: The Learning and Cognition program admits students every semester. The priority application deadline for Fall and Summer is February 15. The priority application deadline for programs that begin in Spring is October 1. It is strongly recommended that PhD applicants complete their applications early (by December 15) to be considered for fellowships beginning in the following Fall semester. The following are the final University application submission deadlines: March 1 for Summer admission, July 1 for Fall admission, and November 1 for Spring admission.

- A minimum requirement for admission to the master's degree program includes an upper-division undergraduate grade-point average of 3.0 and the minimum scores shown below for the Graduate Record Examination (GRE) as well as the TOEFL, if applicable.
- A minimum requirement for admission to the specialist or doctoral programs includes a grade-point average of 3.3 or better in a graduate program, a master's degree from a recognized institution, and the minimum scores shown below on the Graduate Record Examination (GRE) as well as the TOEFL if applicable.
- A minimum score at the 50th percentile on the verbal reasoning section of the GRE is required. Preference will be given to applicants who earn a percentile rank of 75% or above on the verbal reasoning section.
- A minimum score at the 20th percentile on the quantitative reasoning section of the GRE is required. Preference will be given to applicants who earn a percentile rank of 35% or above on the quantitative reasoning section.
- A score of 3.5 or above on the analytical writing section of the GRE.
- A score of 90 or above on the Internet-based version of the TOEFL is required of international students whose native language is not English.

Sport Psychology: Minimum requirements for admission to a master's degree program include a grade-point average of 3.0 in the last two years of the undergraduate program and scores at least at the 50th percentile on the verbal reasoning and quantitative sections of the Graduate Record Examination (GRE). Also, a score of 90 or above on the Internet-based version of the TOEFL is required of international students whose native language is not English.

Minimum requirements for admission to the doctoral programs include an upper-division undergraduate grade-point average, a master's degree from a recognized institution with a minimum graduate GPA of 3.5, and the following minimum scores on the GRE:

- A minimum score at the 50th percentile on the verbal reasoning section of the GRE is required. Preference will be given to applicants who earn a percentile rank of 75% or above on the verbal reasoning section of the GRE.
- A minimum score at the 50th percentile on the quantitative reasoning section of the GRE is required. Preference will be given to applicants who earn a percentile rank of 75% or above on the quantitative reasoning section of the GRE.
- A score of 3.5 or above on the analytical writing section of the GRE.
- A score of 90 or above on the Internet-based version of the TOEFL is required of international students whose native language is not English.

Exam Policies

Master's students who are taking the thesis option and all doctoral students are expected to write and defend both a prospectus and final thesis/dissertation to their committee. The committees must be formed according to the rules of The Graduate School and College of Education.

Learning and Cognition: All committee members and the student must attend the entire defense in real time, either by being physically present or participating via distance technology. A grade of PASS for the defense requires the approval of all members of the committee.

Sport Psychology: Both the defending student and all committee members will attend all defenses in person. However, if this is impossible, Skype or another form of video conferencing can be used under the following guidelines: the defending student must attend in person, two examiners may attend the PhD dissertation defense via Skype/videoconference, all others must attend in person. If more than two examiners are unable to attend in person, the defense must be rescheduled.

Instructional Systems & Learning Technologies

Website: <http://education.fsu.edu/degrees-and-programs/instructional-systems-and-learning-technologies>

This program offers a Master of Science (MS) a Doctor of Education (EdD) and a Doctor of Philosophy (PhD) in Instructional Systems and Learning Technologies (ISLT). Emphasis is placed on facilitating learning and improving performance through the analysis, design, development, implementation, evaluation, and management of appropriate processes and tools. The program has a strong focus on instructional design, emerging technologies, and human performance improvement. Excellent job opportunities and salaries await graduates of the program. Alumni work in a variety of settings including large corporations, colleges and universities, government agencies, consulting firms, the military, and public schools.

The MS program prepares students to become practitioners in the ISLT field. It requires a minimum of 36 graduate credit hours and can be completed in two years. The ISLT master's degree is offered both on campus and online. Non-Florida residents (including international students) accepted to the online MS program may be eligible for reduced tuition.

The EdD program prepares school-practitioners to engage in problem solving and research in applied settings. The program consists of seventy-two graduate credit hours past the master's degree, inclusive of a dissertation. The EdD program is an online program with a cohort-based learning approach. Students who keep pace with their cohort will complete the degree in three years.

The PhD program prepares students for careers as research scientists and faculty members. Students are required to complete both coursework and a dissertation. The PhD program is a residential program.

The ISLT program also offers graduate certificates in Human Performance Technology, Online Instructional Development, and Online Teaching and Learning. Each certificate program requires a minimum of fifteen graduate credit hours of coursework and can be completed on campus or online along with a graduate degree or as a stand-alone certificate.

Admission Requirements

The following are required for admission to the Instructional Systems and Learning Technologies (ISLT) program:

- A bachelor's degree from an accredited institution.
- A minimum upper-division undergraduate GPA of 3.0 is required for admission to the MS and graduate certificate programs; a minimum upper-division undergraduate GPA of 3.2 is required for admission to the PhD program; an earned master's degree with a minimum graduate GPA of 3.2 is required for admission to the EdD program.
- GRE verbal reasoning scores at or above the 50th percentile and a score on the quantitative reasoning section for all degrees; GRE analytical writing scores of at least 3.5 for the MS and EdD degree programs, and at least 4.0 for the PhD program; applicants to the PhD program must also score at or above the 50th percentile on the quantitative reasoning section, and applicants to the EdD program must also score at or above the 50th percentile on the verbal reasoning section.

Note: GRE scores may be waived for MS degree program applicants only who meet one or more of the following criteria and provide satisfactory documentation:

- Five years of professional experience as an instructional designer and a 3.0 (or better) upper-division undergraduate GPA from an accredited institution.
- A completed Master's, JD, MD, or PhD degree with a 3.0 (or better) GPA from a North American accredited institution.
- Completion of 9 graduate credit hours of a graduate certificate from the FSU Instructional Systems and Learning Technologies program with a graduate GPA of 3.2 or higher.
- A statement of purpose explaining career goals and aspirations
- Letters of recommendations from three individuals who can address the student's likelihood of success in graduate school
- A professional résumé
- A TOEFL score of 90 or above is required for all international students whose native language is not English.

Exam Policies

Students enrolled in the ISLT MS program are required to complete a portfolio as part of their degree requirements. The purpose of this portfolio is to assess the degree to which the competencies expected of an ISLT MS graduate have been mastered.

Students enrolled in ISLT PhD and EdD programs are required to complete a qualifying review by the end of their first year and a preliminary examination before beginning work on their dissertation. ISLT PhD and EdD students are also expected to write and defend both a prospectus and final dissertation to their committee. The committees must be formed according to the rules of

the Graduate School and College of Education. The candidate and all committee members must attend and participate in the defense meetings. For PhD committees, the student and major professor must be physically present in the room. One committee member may join electronically (e.g., via Skype or telephone) if necessary. Exceptions to this policy (e.g., if two members request electronic participation) must be approved by the program faculty on a case-by-case basis prior to the defense. Should a committee member be unable to attend at the last minute, an alternate member who meets the criteria for committee membership set forth by the Graduate School may be substituted. For EdD committees, the defense may be conducted via videoconference so long as all committee members are present in real time.

Measurement and Statistics

Website: <http://education.fsu.edu/degrees-and-programs/measurement-and-statistics>

The Measurement and Statistics program offers master's and doctoral degrees.

The **Measurement and Statistics** major is designed to prepare leaders in educational research to serve in the following types of professional positions: educational measurement and educational statistics specialist for a test publisher or governmental licensing, certification, or assessment unit; director of measurement activities for a school or school system; measurement and educational statistics expert for a regional education laboratory; or professor in measurement and statistics at a college or university.

Admission Requirements

The Measurement and Statistics program admits students in all semesters. However, opportunities to funding are most likely for Fall admissions. Completed applications for those interested in scholarship funding should be submitted by January 1. Completed applications will be considered for admission until available Fall student slots are filled, after which the application portal will be closed.

- For admission to the master's degree program, students must have a grade-point average of 3.0 or better in the last two years of the undergraduate program, or an average of at least a 3.0 in a master's degree from an accredited institution.
- For admission to the doctoral program, students must have a grade-point average of at least a 3.3 or better in the last two years of the undergraduate program, or an average of at least a 3.0 in a master's degree from an accredited institution.
- For both programs a score of at least the 50th percentile on the verbal reasoning and quantitative sections of the Graduate Record Examination (GRE) is required. Preference will be given to applicants with a percentile rank of 85% or above on the quantitative reasoning section. A TOEFL score of at least a 550 on the paper-based exam and 80 on the internet-based exam is required of international applicants whose native language is not English.

Exam Policies

Defenses can be held with the assistance of distance technology (e.g., Skype); the student and major professor must be physically present. A grade of PASS for the defense of a thesis or dissertation requires approval of a majority of the committee.

Counseling Psychology and Human Systems

Website: <http://education.fsu.edu/degrees-and-programs/counseling-psychology-and-school-psychology>

The Counseling Psychology and Human Systems program offers work leading to the Doctor of Philosophy (PhD) in the Combined Program in Counseling Psychology and School Psychology.

Combined Program in Counseling Psychology and School Psychology (PhD)

The doctoral degree in the Combined Program in Counseling Psychology and School Psychology prepares students for professional positions as university faculty; counseling psychologists in university counseling centers; school psychologists in educational settings; mental health care providers in community, medical, and business settings; administrators in public and private agencies; and researchers, evaluators, and planners of human service programs.

Students who apply for admission and are accepted into the Combined Doctoral Program in Counseling Psychology and School Psychology are expected to acquire basic competency in counseling psychology **and** school psychology, as well as advanced competency in counseling psychology **or** school psychology, leading to appropriate national certification and state li-

censure. Within this combined program all students share a common core of experience in research and practice in counseling psychology and school psychology, while expressing a professional focus by selecting a concentration in counseling psychology or school psychology. Students also have the option of dual concentration at the **advanced** competency level in both counseling psychology and school psychology by completing additional courses, practica, and internship hours. All majors within the program are offered under the degree title of Doctor of Philosophy (PhD) in Counseling Psychology and Human Systems. The Combined Doctoral Program at Florida State University is accredited by the American Psychological Association as a Combined Professional Program in Counseling Psychology and School Psychology.

Counseling and Human Systems

Website: <https://education.fsu.edu/degrees-and-programs/graduate-programs>

The Counseling and Human Systems program offers four integrated Specialist in Education (EdS)/Master of Science (MS) degrees: Career Counseling, Mental Health Counseling, School Counseling, and School Psychology.

Career Counseling, Mental Health Counseling, and School Counseling Majors in Counseling and Human Systems (MS/EdS)

The specialist/master's (MS/EdS) degree in Counseling and Human Systems is designed to prepare individuals for professional positions at various levels in elementary and secondary schools, junior colleges, institutions of higher education, or in a wide variety of human-services agencies (e.g., mental health, substance abuse, career counseling, adult and child counseling). Students majoring in Counseling and Human Systems at the MS/EdS level select a specialization in Career Counseling, Mental Health Counseling, or School Counseling. These majors are offered as specialist-level programs with an integrated master's degree.

The Career Counseling major includes a minimum of sixty-three graduate semester hours. The Mental Health Counseling major includes a minimum of sixty-three graduate semester hours. The School Counseling major includes a minimum sixty graduate semester hours. A supervised internship in an applied setting is also required in all three programs. The Career Counseling and Mental Health Counseling specializations are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

School Counseling is offered as a separate major within Counseling and Human Systems as a specialist-level program with an integrated master's degree leading to initial Florida certification in School Counseling. The School Counseling major requires students to successfully pass the Florida Department of Education's General Knowledge Test, Professional Education Test, and the Subject Area Examination as a requirement for graduation and a to be a certified school counselor in the state of Florida. This major is a Florida Department of Education-approved Other School Personnel Preparation program in school counseling, grades PK through 12 (DOE Certification Area 304).

Students enrolled in the Career Counseling, Mental Health Counseling, and School Counseling programs are eligible to take the National Counselor Examination during the Spring semester of their last year of study. The Career Counseling major, the Mental Health Counseling major and the School Counseling major in Counseling and Human Systems are offered as integrated MS/EdS programs, and as a result, the MS and EdS degrees cannot be completed separately.

School Psychology Major in Counseling and Human Systems (MS/EdS)

School Psychology is offered as a separate major within Counseling and Human Systems as a specialist-level program with an integrated master's degree leading to initial Florida certification in School Psychology. This educator preparation program prepares personnel to practice as school psychologists within educational as well as nontraditional settings. This major is accredited by the National Association of School Psychologists and is a Florida Department of Education-approved Other School Personnel Preparation program in school psychology grades PK through 12 (DOE Certification Area 330). The School Psychology major in Counseling and Human Systems is offered as an integrated MS/EdS program, and as a result, the degrees cannot be completed separately.

Associated Centers

The **Human Services Center**, located in the College of Education, serves as a site where graduate students in all degree offerings receive intensive training in skill development. Through the center, students provide educational,

personal, and vocational counseling. School psychologist services are offered to members of the community in the Adult Learning and Evaluation Center, which is housed in the Human Services Center. Here students receive direct faculty supervision as part of their clinical training.

The **Adult Learning Evaluation Center** is a not-for-profit assessment center that provides low cost psycho-educational evaluations for college students and other adults who may be experiencing scholastic difficulties due to a possible learning disability or Attention Deficit Hyperactivity Disorder. The clinic staff consists of faculty members, licensed psychologists, a clinical director, and graduate students in the specialties of school and counseling psychology. In addition to evaluation services, the center provides educational workshops and individual client coaching and maintains an ongoing research and training function.

The **Center for the Study of Technology in Counseling and Career Development (Tech Center)** assists practitioners, researchers, software developers, and policy makers in improving the design and use of computer applications in counseling and career development. The Center also assists practitioners, researchers, and policy makers in improving the cost effectiveness of career services. The center's Web site, <https://career.fsu.edu/tech-center>, expands this mission to include serving individuals and students interested in career development and computer technology.

Admission Requirements

All applicants to graduate degree programs must at least meet the minimum admission requirements for undergraduate grade point average, graduate grade point average (if applicable), and/or Graduate Record Examinations scores. Each degree offering may set different standards for admission based on programmatic objectives and the applicant pool. Applicants can find specific admission requirements on the Web page of the program of interest (see <https://education.fsu.edu/degrees-and-programs/graduate-programs>). A formal application for graduate study must include the following: 1) official graduate application to Florida State University (apply online at <https://admissions.fsu.edu/gradapp/>); 2) three letters of recommendation on letterhead; 3) a current résumé highlighting relevant educational, clinical and research experience; and 4) an autobiographical/personal statement including how the degree sought can meet personal/professional goals. Admitted students who do not have the required prerequisite coursework will be expected to make up these deficiencies early in their program. Although not required, applicants who have completed courses in general psychology, human services, school settings, and/or related areas, and who have some full-time, part-time, or volunteer experience in counseling, education, or related social services fields, will be given preference in the application process. We value a diversity of perspective in our program and encourage students from diverse backgrounds to apply.

Admission to Educator Preparation Programs

Section 1004.04, Florida Statutes, Public Accountability and State Approval for Educator Preparation Programs, and State Board of Education Rule 6A-5.066 require that all students seeking admission into advanced educator preparation programs at Florida State University achieve a minimum GRE score or pass all four sections of the General Knowledge Exam of the Florida Teacher Certification Exam (FTCE).

Students planning to pursue an Educator Preparation program at Florida State University must be formally recognized as such by making application to the College of Education in the first term of program enrollment. Admission to an Educator Preparation program is administered by the Dean of Education and is assigned to the Office of Academic Services and Intern Support (OASIS), 2301 Stone Building. Admission to Educator Preparation is distinct from admission to a college or school in that students must meet State of Florida and Florida Department of Education criteria. For details on the criteria for admission, the student should refer to the "Planning Guide to Educator Preparation Programs" section in the "College of Education" chapter of this *Graduate Bulletin*.

Per policy adopted by the Florida State University Professional Education Advisory Council, any student seeking readmission to an educator preparation program shall be responsible for meeting the most current course, clinical, and certification requirements set by that program; readmitted students in these programs will not be "grandfathered" under the educator preparation requirements in effect at the time of original admission to the major.

The Educator Preparation admissions standard for state-approved programs is subject to revision based on changes in Section 1004.04, Florida Statutes, Public Accountability and State Approval for Educator Preparation Programs, and State Board of Education Rule 6A-5.066, Approval of Educator Preparation Programs.

Criteria for Admission to an Educator Preparation Program

- Hold a current Florida Professional Educator Certificate OR earn passing scores on all four sections of the Florida Teacher Certification Exam General Knowledge Test prior to the end of the first semester of enrollment in the graduate educator preparation program;
- Have earned a baccalaureate degree from a regionally-accredited institution;
- Submit an online Graduate Application for Admission to Educator Preparation to the Office of Academic Services and Intern Support: https://fsu.qualtrics.com/jfe/form/SV_00RfV2wNWTMD5hX (this online application is distinct from admission to the College or a specific academic program);
- Approval of the respective department in accordance with departmental criteria; and
- Approval of the Office of Academic Services and Intern Support.

Clinical Experience Requirements

- At least thirty semester hours completed in the subject specialization area as determined by the student's program;
- Professional education coursework to include (a) the acquisition of reading literacy for the appropriate certification level; (b) integrated classroom management, school safety, professional ethics and educational law; (c) human development and learning; and, (d) assessment to include understanding the content measured by state achievement tests, reading and interpreting data, and using data to improve student achievement;
- A series of clinical experiences in diverse settings throughout the program that culminates with a full-time student teaching experience of at least ten weeks duration in an approved setting; and
- A Level II Security Check is required for all FSU students who will have direct contact with PreK-12 students. Students should be aware that if you have been arrested for certain crimes you may not be considered for a teaching position. Fingerprinting and Level II-background clearance are required for any placement in a PreK-12 setting.

Students should consult with a program advisor for specific course requirements.

Exam Policies

Master's/specialist students who are taking the thesis option and all doctoral students are expected to write and defend both a prospectus and final thesis/dissertation to their committee. The committees must be formed according to the rules of The Graduate School and College of Education. For oral preliminary exams and oral prospectus defense, the student must be physically present and one, but no more than one, committee member may participate via distance technology. For the dissertation defense, the student, major professor, and the University representative must be physically present on campus; remaining committee members may participate via distance technology. A grade of PASS for all oral exams requires the approval of the majority of the committee.

Requirements for Lab Classes, Practicum and Internship in School Psychology

A Level II Security Check is required for all Florida State University Students who will have direct contact with children (birth to age 18 years). Students should be aware that if they have been arrested for certain crimes they may not be considered for a position as a psychologist, school psychologist, or counselor. Fingerprinting and Level II background clearance are required for any placement in a setting with children (birth to age 18 years) including lab courses involving volunteers ages birth to 18 years.

Definition of Prefixes

ADE—Adult Education

APK—Applied Kinesiology

DEP—Developmental Psychology

EDF—Education: Foundations and Policy Studies

EDG—Education: General

EDP—Educational Psychology

EME—Education: Technology and Media

MHS—Mental Health Services

PCO—Psychology for Counseling

PET—Physical Education Theory

PSB—Psychobiology

RCS—Rehabilitation Counseling Services

SDS—Student Development Services

SOW—Social Work

SPS—School Psychology

SYP—Social Processes

Graduate Courses

ADE 5189. Staff Training and Development (3). This course covers the theory and practice of training and staff development based on the design and use of experiential instructional interventions meant to enhance individual, group, and organizational efforts. This course introduces students to the key concepts, principles, and processes that drive the staff training and development function and to enable them to improve their related analytical and technical skills.

APK 5404. Sport Psychology (3). This course provides an introductory graduate survey of sport psychology topics and research.

APK 6412. Sport and Exercise Psychology Ethics (3). This course consists of in-depth elaboration on current important professional issues related to ethics in sport and exercise psychology. The issues presented and discussed in class consist of book chapters, the American Psychological Association (APA) and the Association of Applied Sport Psychology (AASP) Codes of Ethics publications.

DEP 5068. Life-Span Human Development (3). This course discusses central theories and topics in developmental psychology across the life span, focusing especially on the implications of developmental theory and empirical research on counseling and other helping professions.

DEP 5070. Child and Adolescent Development (3). This course demonstrates that being an effective school psychologist depends on many factors, including the ability to ensure that students participate in services that are appropriate for their developmental levels. The course teaches students to learn to conceptualize children's development from multiple theoretical perspectives and translate current scientific findings in order to address complex issues that arise in the school setting.

EDF 5300. Motivation and Emotion (3). This graduate-level seminar provides students with information to understand underlying processes of humans' motivations and emotions.

EDF 5400. Basic Descriptive and Inferential Statistics Applications (4). This course prepares students to both read and write papers containing basic statistical analyses. Topics covered include descriptive statistics, basic plots and graphing, hypothesis testing, confidence intervals, correlational techniques, and introduction to the general linear model.

EDF 5401. General Linear Model Applications (4). Prerequisite: EDF 5400. In this course, topics included are general linear model applications including multiple regression, ANOVA, ANCOVA, aptitude-treatment-interaction analysis, and other techniques.

EDF 5402. Advanced Topics in Analysis of Variance Applications (3). Prerequisite: EDF 5400 or equivalent. This course explores topics such as multiway ANOVA, covariance, repeated measures designs, nested designs, and generalizability theory.

EDF 5404. Bayesian Data Analysis (3). Prerequisite: EDF 5000. Corequisite: EDF 7418. This course provides students with practice in applying Bayesian methods for linear, generalized linear, and hierarchical linear models to educational data sets. The class covers using both the EM and MCMC algorithms in R and Stan. The course emphasizes interpretation of results and writing summaries of analyses.

EDF 5406. Multivariate Analysis Applications (3). Prerequisite: EDF 5401. This course examines design and analysis of research studies with multiple independent and dependent variables including path analysis, confirmatory factor analysis, and exploratory factor analysis.

EDF 5409. Causal Modeling (3). Prerequisite: EDF 5406. This course considers causal modeling techniques, including structural equation modeling, longitudinal growth modeling, multiple-sample structural equation modeling, as well as assumptions underlying causal modeling.

EDF 5431. Classroom Assessment (3). This course prepares prospective teachers for activities related to assessing students including establishing validity evidence, enhancing generalization of observations, using traditional and alternative assessment strategies, interpreting and using data to improve achievement, and utilizing assessment in the process of learning.

EDF 5432. Measurement Theory I (3). Prerequisite: EDF 4440 or EDF 5400. This course is an introduction to test theory; mathematical bases for operational procedures; practical applications of theory.

EDF 5434. Measurement Theory II (3). Prerequisite: EDF 5432. Pre- or corequisite: EDF 5402 or EDF 5401. This is an advanced course in the theory, principles, and techniques of measurement.

EDF 5435. Theory of Scaling (2). Prerequisite: EDF 5434. This course focuses on the theory and application of uni-dimensional and multidimensional scaling techniques.

EDF 5442. Inquiry and Measurement for Practitioners (3). This foundational course addresses inquiry and measurement concepts for master's students. It focuses on inquiry to support data-based decision making processes related to learning and human performance.

EDF 5448. Scale and Instrument Development (3). Prerequisites: EDF 5400, and EDF 5431 or EDF 5432. This course provides the skills essential to conceptualizing, designing, producing, administering, and interpreting educational and psychological scales and instruments. Focuses upon measures of achievement, aptitude, attitude, and interest.

EDF 5462. Evaluation of New Educational Programs and Practices (3). Prerequisite: EDF 5461. This course is an advanced level seminar on the theoretical and pragmatic aspects of program evaluation. Students begin with an overview and understanding of evaluation theoretical roots and the philosophical premises shaping evaluation theory. This leads to further understandings about the application of different research designs to the practice of evaluation, as presented in evaluation cases.

EDF 5481. Methods of Educational Research (3). This course is a survey of selected types of educational research and appropriate related techniques; emphasis on criteria of validity.

EDF 5484. Educational Data Analysis (3). Prerequisite: EDF 5401. This course provides students with practice in applying linear and generalized linear models to educational data sets. The focus is not on specific methods, but rather on identifying which methods are appropriate for a given data sets, interpreting the results and writing up reports summarizing the results.

EDF 5489. Applied Research Methods in Learning Design and Performance Technology (3). This course is a survey of applied research methods commonly used to support problem-solving in learning design and performance technology.

EDF 5681. Urban and Rural Schools (3). This course examines education within the context of urban and rural school settings.

EDF 5906r. Directed Individual Study (1–3). (S/U grade only). This course provides students with a self-directed learning opportunity focused on a specific area of interest and is negotiated with the supervising faculty member. May be repeated to a maximum of thirty (30) semester hours.

EDF 5910r. Supervised Research (1–9). (S/U grade only). This course provides students with an opportunity to work on a research project(s) under the supervision of a professor. May be repeated to a maximum of eighteen semester hours.

EDF 5916. Research Proposal Writing (1). Corequisite: EDF 5481. This course provides the opportunity to develop a written research proposal (including literature review) and to select and specify the appropriate research design and data collection methods to answer one's research questions.

EDF 5940r. Supervised Teaching (1–4). (S/U grade only). May be repeated to a maximum of four semester hours. A maximum of three hours may apply to the master's degree.

EDF 5942r. Field Laboratory Internship (1–8). (S/U grade only). May be repeated to a maximum of twenty-four semester hours.

EDF 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

EDF 5992r. Educational Psychology Colloquium (0-1). (S/U grade only.) This course is an introduction to the skills needed for success in graduate study in educational psychology, including writing, reading academic papers, research ethics, and presentation skills. This course may be repeated to a maximum of fifteen (15) credit hours.

EDF 5973r. Specialist in Education Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

EDF 6057. Large-Scale Assessment (3). Prerequisite: EDF 5432. Corequisite: EDF 5434. This course prepares students to work on large-scale assessment programs. Students gain familiarity with all aspects of the program including: item development, field-testing, test construction, scaling, equating, vertical linking, standard setting and generating technical reports.

EDF 6482. Experimental and Quasi-Experimental Research Design (3). This advanced course develops skills necessary to plan high quality research and be a discriminating consumer of existing research. The course covers both randomized experiments and non-randomized quasi-experiments, exploring the implications of the design for causal conclusions which could be drawn from the data.

EDF 6499. Discourse and Conversation Analysis (3). This course prepares students to use discourse and conversation analysis techniques in their research.

EDF 6576. Policy to Practice: District, School, and Classroom Policy Implementation (3). This course focuses on the implementation of educational policy at the district, school, and classroom levels. The course covers the central theories that have been used to understand the goals and mechanisms of different state and federal policy efforts aimed at improving schools and schooling; reviews research on how districts, schools, and teachers in classrooms respond to state and federal policies; and also covers three different "cases" representing dominant trends in educational policy, providing a multi-level perspective on how state and federal policies shape district, school, and classroom practices.

EDF 6683. Family Support for Learning (3). This course addresses the theories, current research, and research methods associated with the multiple influences families have on students' educational achievement, with particular attention to issues of development and diversity.

EDF 6755. Theoretical and Practical Issues in Education (3). This course is designed as a synthesis for some of the most important themes relevant to learning, cognition, and instruction, including theoretical and practical issues in education related to lifespan development, human cognition, theories of learning and instruction, motivation and emotion, and family support for children. The goal of this course is to consider the implications of these issues for instructional practices across the lifespan.

EDF 6912r. Preliminary Research (1–3). (S/U grade only). This independent study course provides students with a self-directed learning opportunity focused on a specific area of interest and is negotiated with the supervising faculty member. This course may be repeated up to eighteen semester hours.

EDF 6937r. Seminar in Advanced Research Problems (1–3). This seminar course focuses on current research topics regarding ethics as well as developing the rudiments for constructing students individual instructional philosophy. Students utilize a variety of research materials to investigate traditional schools of thought and academic theory. May be repeated to a maximum of fifteen (15) semester hours.

EDF 6980r. Dissertation (1–12). (S/U grade only). May be repeated in the same semester.

EDF 7418. Multilevel Modeling (3). Prerequisite: EDF 5401. This course provides an introduction to multilevel models. Through this course, students learn about a variety of multilevel or hierarchical models appropriate for a broad range of applications. Topics discussed within the context of each multilevel model include hypothesis testing, evaluation of model fit, and computer packages that can be used to estimate the various multilevel models.

EDF 7489. Meta-analysis (3). Prerequisites: EDF 5400 and either EDF 5401 or EDF 5402. This course covers conceptual issues and analysis methods relevant to research reviews and quantitative synthesis methods. Students are introduced to the issues and controversies in the area of research synthesis and to a set of quantitative procedures for summarizing sets of related studies.

EDF 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

EDF 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

EDF 8969r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

EDF 8976r. Master's Thesis Defense (0). (P/F grade only.)

EDF 8979r. Specialist in Education Thesis Defense (0). (P/F grade only.)

EDF 8985r. Dissertation Defense (0). (P/F grade only.)

EDG 6328. Alternate Views of Teaching and Learning (3). This course is an overview of the empirical and conceptual basis for a variety of viewpoints regarding teaching, learning, and models of instructional design.

EDG 6362. Instructional Systems Research Seminar (3). This course heightens students' awareness of the critical issues in instructional systems. It examines how research methodologies have been used to study these issues, explores how research programs and theories are progressively honed, and defines programmatic areas of disciplined inquiry.

EDG 6363. Practicum in Experimental Learning Research (3). Prerequisites: EDF 5400 and EDF 5481. This course provides instruction and practice in planning, conducting, and describing (both orally and in writing) experimental research.

EDP 5216. Theories of Learning and Cognition in Instruction (3). This course focuses on the applications of prominent contemporary theories of learning, cognition, and information processing to instructional settings.

EDP 5217. Principles of Learner Motivation (3). This course examines the study of theories and concepts of human motivation. The primary emphasis is on the motivation to learn and techniques for stimulating and sustaining learner motivation.

EDP 5275. Development of Children in School (3). This course discusses central theories and topics in developmental psychology across the life span, focusing especially on the implications of developmental theory and empirical research on counseling and other helping professions.

EDP 5285. Group Processes in Instruction (3). This course examines the theory, research, and practice in interpersonal interaction, group dynamics, and management of group processes in the classroom and school setting. Topics include group development, leadership, conflict management, organizational dynamics, values.

EDP 5935. Topics in Educational Psychology (3). This course surveys major theories with respect to students' learning, motivation, individual differences in abilities, and development of cognitive and social skills as they apply to instructional decision making. The course components enable students to put research into practice and balance theoretical and practical perspectives of students' learning and teachers' practices.

EME 5077. Mobile Learning (3). This course addresses issues related to design, development, and implementation of mobile solutions for learning and performance support.

EME 5078. Design of Online & Digital Adaptive Learning (3). This course is designed to guide students to develop and implement online and digital adaptive learning technologies by understanding and applying the interdisciplinary principles of instructional design, learning technologies, human computer interaction, and learning analytics. The course reviews the design theories of adaptive and personalized learning and examines how instructional designers and educators can leverage digital culture, emerging technologies, and data science to design or develop online and digital adaptive learning products and environments.

EME 5250. Open Learning and Open Educational Resources (3). This course addresses the historical and social context of open learning and open education resources (OER), and engages students directly in the design, development, and implementation of open learning experiences and resources.

EME 5405. Media, Text, and Technology (3). This course covers what media can and cannot do, about texts that can be produced and disseminated and about the technologies that help and hinder the process of understanding.

EME 5456. Online Pedagogy and Design (3). This course presents various approaches to both synchronous and asynchronous online learning, online class activity design, and online class management. It prepares students to design and deliver their own online classes.

EME 5457. Introduction to Distance Learning (3). This course provides an overview of the foundations of distance learning and online educational programs. It examines the design and technologies necessary for quality interactive education at a distance.

EME 5601. Introduction to Instructional Systems (3). This course is an overview of systems theory applied to instructional systems development and includes principles and procedures for developing total instructional systems. In the course, students learn about the systematic approach to instructional design, the contexts in which this approach is applied, and the roles instructional systems professionals in the instruction design and performance improvement processes.

EME 5603. Introduction to Systematic Instructional Design (3). This course is an introduction to the systematic design of instruction. Includes practical experience in developing and evaluating instructional materials.

EME 5606. Technology and Design (3). This course focuses on developing the visual design, multimedia, graphic design, and technology skills that are foundational to instructional design and development. Students learn to apply theory and principles to the development of instructional media using popular software programs.

EME 5608. Trends and Issues in Instructional Design (3). This course is an overview of the field of instructional design and technology. Includes historical perspective, research findings, and current issues and trends.

EME 5614. Design of Learning Games (3). This course is designed to guide students to design and prototype learning games by understanding and applying the interdisciplinary principles of game design, psychology of play, education, and cognitive science.

EME 5906r. Directed Individual Study (1-3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

EME 6064. Application of Research Methods in Learning Design & Performance Technology (3). This course provides students with hands-on experience applying research methods associated with learning design and performance.

EME 6356. Learning and Web Analytics (3). This course addresses the collection and use of data for decision making and assessment in learning and human performance contexts. Students get hands-on experience with small data sets and learn how big data sets are collected and used.

EME 6357. Evaluation of Training in HPT (3). This course focuses on the evaluation of training and instruction from a human performance technology perspective. The course provides the knowledge and skills for evaluating training systems and instructional programs. Students discuss training systems dynamics, interact with organizational environments, synthesize ideas through presentations, and write an evaluation proposal.

EME 6403. Designing for Online Collaborative Learning (3). Prerequisite: EME 5601. This course teaches strategies and techniques for designing instructional activities for distance learning based on theories and principles of collaborative learning.

EME 6414. Web 2.0-Based Learning and Performance (3). This course focuses on how the widespread use of social networking/media have influenced learning and human performance. Additionally, the course covers how instructional learning experiences and performance supports might be designed to take advantage of participatory culture.

EME 6415. Development of Computer Courseware (3). Prerequisite: EME 5603 or EDG 6677. This course focuses on procedures for the systematic design and production of computer-based instruction. Includes practice in computer-based course development.

EME 6476. Internet Based Inquiry (3). This course focuses on two key issues related to the Internet and research: (1) Conducting research on online settings and (2) Using Internet-based tools to support data collection and analysis.

EME 6507. Development of Multimedia Instruction (3). In this course, students practice basic instructional systems design principles in active and digital learning environments. The course focuses on the design, development, implementation/distribution, and assessment of multimedia-based learning experiences systems.

EME 6616. Case Studies in Instructional Systems (2). This course studies representative contemporary instructional delivery systems, their planning, development, and implementation.

EME 6631. Managing Instructional Development (3). Prerequisite: EME 5601. This course is an introduction to procedures for managing instructional development projects and organizations. Includes project and organizational design and development, staff development, and leadership principles.

EME 6632. Instructional Systems Inquiry Project Design and Management (1). (S/U grade only.) This course explores issues related to the design and management of inquiry-based projects focused on instructional systems problems of practice. The course uses a project-based approach.

EME 6635r. Seminar in Advanced Instructional Systems Problems (3). Prerequisites: EDG 6362 and EDF 5489. This course is only offered periodically and addresses special topics that are not covered in other courses.

EME 6636. A Systems Approach to the Management of Change (3). This course discusses performance interventions in terms of changes in organizational environment, structure, processes, and workforce performance. The course examines the issues surrounding planning, implementing, sustaining, and evaluating changes that result from instructional and non-instructional interventions which target the overall improvement of organizational performance.

EME 6665. Synthesis, Analysis, and Argumentation in Instructional Systems Research (3). This course covers tools, techniques, and procedures for finding, synthesizing, analyzing, and summarizing research related to past and ongoing relevant topics in Instructional Systems.

EME 6677. Advanced Instructional Design and Development (3). Prerequisites: EDP 5216 and EME 5603. This advanced course explores theory and research that serve as the foundation for current and emerging instructional design (ID) practice. The course is aimed at graduate students who have already mastered basic knowledge and skills related to instructional design and learning theory.

EME 6691. Performance Systems Analysis (3). This course is an introduction to human-performance technology (HPT) and familiarizes students with HPT theoretical foundations and practical methodology through a performance-systems analysis (PSA) project. The course covers systems thinking, systematic processes involved in conducting a PSA, as well as PSA models and their application for identifying performance gaps and recommending solutions.

EME 6694. Academic Publishing in Instructional Systems and Learning Design (3). This course addresses the academic publishing process and prepares Instructional Systems and Learning Design students to disseminate the results of their research at conferences and through academic journals and books.

EME 6920r. Learning Design and Performance Technology Colloquium (1). (S/U grade only). This colloquium addresses timely issues related to practice and inquiry in the field of learning design and performance technology. Ethics, standards, and cases are explored.

MHS 5007. Foundations of Mental Health Counseling (3). This course provides a history and overview of the counseling profession, including ethical and legal issues, controversies in the field, and the impact of contemporary problems on mental health problems.

MHS 5010. Foundations of School Counseling (3). This course is an introduction to the field of school counseling with an emphasis on historical foundations, role and function, legal and ethical issues, and standards of practice. It provides a theoretical and practical orientation to applied counseling practice in the schools.

MHS 5060. Psychosocial and Multicultural Aspects of Counseling (3). This course examines the relationship among psychological, social, environmental, disability, and multicultural factors as they pertain to understanding human behavior.

MHS 5340. Foundations of Career Development (4). This course examines the career development of individuals and the process of career counseling and guidance.

MHS 5341. Career Development Program Design and Evaluation (3). This course examines contemporary career interventions and strategies for program development and implementation.

MHS 5400. Introduction to Counseling Theories and Techniques (4). This course examines traditional theories of personality and counseling, as well as how to translate theory into effective practice. Develops basic counseling skills that include an awareness of self and a capacity to use one's self in the counseling process.

MHS 5435. Theories and Fundamentals of Family Therapy (3). This course provides students with theories and models of intervention related to working with families and family systems.

MHS 5496. Current Issues in the Psychology of the Gifted (3). Prerequisite: Instructor permission. This course exposes students to current issues and trends in the psychology of the gifted. Topics include intelligence and intelligence testing, characteristics of the gifted, creativity, talent development, underachievement, socio-emotional development of the gifted, and policy impacting the gifted. Students formulate a research proposal based on a review of the research literature in one area of giftedness.

MHS 5511. Group Counseling: Theory and Practice (3). This course covers introductory group leader training; theoretical and experiential components.

MHS 5801r. Practicum in Counseling and Rehabilitation (4). This course provides intermediate training in counseling in the human services center, through direct client counseling, role play, instruction, and observation. May be repeated for a maximum of sixteen semester hours.

MHS 5860r. Supervised Teaching (1-4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three semester hours may apply to the master's degree.

MHS 5905r. Directed Individual Study (1-3). (S/U grade only). This course provides students with a self-directed learning opportunity focused on a specific area of interest and is negotiated with the supervising faculty member. May be repeated to a maximum of twenty-one semester hours within the same term.

MHS 5915r. Supervised Research (1-4). (S/U grade only). This course provides students an opportunity to work on a research project or projects under the supervision of a professor. May be repeated to a maximum of twenty one semester hours.

MHS 6220r. Individual Appraisal in Counseling (3). This course allows students to acquire skill in use and interpretation of selected instruments and techniques for individual assessment. May be repeated to a maximum of twelve semester hours.

MHS 6300. Theories of Vocational Behavior (3). This course covers the meaning of work, theories of vocational behavior, career development consultation.

MHS 6401. Evidence-Based Counseling/Psychotherapy (3). Prerequisite: MHS 5400 or equivalent. This course covers the nature of theory and instruction in a variety of counseling theories. Emphasis is placed on counseling-research literature and evidence-based practice.

MHS 6410. Behavior Management: Principles and Applications (3). This course provides understanding of behavior patterns of children and adolescents and develop effective strategies for behavior management.

MHS 6450. Substance Abuse and Addictions Counseling (3). This course is designed to provide graduate students with an overview of theories, concepts, and issues related to the etiology, assessment, diagnosis, and treatment of persons with addictions and substance use disorders.

MHS 6466. Trauma & Crisis Intervention (3). This course provides students with a survey of the complexity of crisis situations, as well as theories of and models of intervention when working with clients during and after traumatic events and crises. The course discusses traumatic experiences including but not limited to grief, suicide, and natural and man-made disasters.

MHS 6600. Consultation and Organizational Development (3). This course covers problem identification, consultation strategies, development of social networks, conflict resolution, workshop development, individual and organizational change strategies in education and related agency settings.

MHS 6610. Supervision (3). This course covers the development of skills in clinical and managerial supervision. Understanding a variety of supervisory models.

MHS 6630. Program Development and Evaluation in Counseling (3). This course covers needs assessment, programmatic goals and objectives, program planning, evaluation design, accountability, and dissemination.

MHS 6715. Design and Critical Review of Research in Counseling (3). This course covers the conceptualization of counseling problems in researchable terms; critical review of published counseling research.

MHS 6720. Introduction to Health Services Psychology Profession (3). This doctoral seminar presents an introduction to professional issues relevant to counseling and school psychology, including topics such as values, current trends, basic therapeutic skills, stress management, and burnout prevention.

MHS 6721. Professional Development Seminar in Advocacy and Ethics for Health Services Psychology (3). Prerequisite: MHS 6720. This doctoral seminar provides an in-depth look at ethical standards and advocacy specific to the field of counseling and school psychology.

MHS 6803. Seminar in Ethics, Law, and Clinical Supervision (3). Prerequisite: MHS 5801. This seminar provides students with exposure to standards of practice in professional psychology, to ethical and legal issues in the provision of psychological services, and to clinical supervision. Students supervise beginning-level graduate students who are counseling clients in the on-campus Human Services Center.

MHS 6805r. Advanced Group or Individual Counseling Practicum (1-4). This course is intensive practice in counseling, consisting of closely supervised practical experience and critique of students practice. May be repeated to a maximum of sixteen semester hours.

MHS 6820r. Counseling Internship (3-6). (S/U grade only). This course is field counseling experience in a planned setting. May be repeated to a maximum of eighteen semester hours.

MHS 6930. Diversity Seminar in Health Service Psychology (3). This doctoral seminar immerses students in diversity-related content intended to facilitate the continued development of their multicultural awareness, knowledge, and skills towards an understanding of intersectionality, social justice, and advocacy.

MHS 6938r. Special Topics in Counseling Psychology (3). This course is an in-depth investigation of a variety of topics in counseling psychology with different topics offered each year. May be repeated to a maximum of nine semester hours. May be repeated in the same semester.

MHS 6946r. Field Practicum in Counseling Psychology (2-6). (S/U grade only). This practicum provides students with an opportunity to integrate theory and practice in the delivery of psychological services relevant to their career goals. Students completing the course enhance their competencies in assessment, intervention, or both. May be repeated to a maximum of twenty-one semester hours.

MHS 6970r. Thesis (3-6). (S/U grade only). A minimum of six semester hours is required.

MHS 6971r. Master's Thesis Defense (0). (P/F grade only.)

MHS 6973r. Specialist in Education Thesis (3-6). (S/U grade only). A minimum of six semester hours is required.

MHS 7962r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

MHS 7972r. Specialist in Education Thesis Defense (0). (P/F grade only.)

MHS 8960r. Master's Comprehensive Examination (0). (P/F grade only.)

MHS 8961r. Preliminary Doctoral Examination (0). (P/F grade only.)

MHS 8980r. Dissertation (1-12). (S/U grade only.)

MHS 8981r. Dissertation Defense (0). (P/F grade only.)

PCO 5095. Computer Applications in Counseling Psychology and Other Human Services (3). This course examines the effective application of computer technology in counseling psychology with an emphasis on mental health, education, and rehabilitation.

PET 5054C. Motor Skill Learning (3). This course focuses on research and theory of learning, performance, and related factors as applied to motor skills.

PET 5216. Applied Sport Psychology (3). This course focuses on the theoretical knowledge and practical skills needed to design and implement a mental skills training intervention with a client operating in a domain requiring performance under pressure.

PET 5222. Cognitive Processes in Sport Psychology (3). Prerequisite: PET 5216. In this course, cognitive processes (decision making, attention memory, etc.) are studied, with an emphasis upon explaining and optimizing sport-related behavior.

PET 5255. Social Bases of Physical Activity (3). This course examines the socio-cultural foundations of play, games, sport, and physical activity.

PET 5390. Measurement in Sport and Exercise Psychology (3). Prerequisites: EDF 5400, EDF 5432, or equivalent. This course considers the application of measurement theory to the domains of sport and exercise psychology. Currently available instruments are reviewed and scale development emphasized.

PET 5769. Theory and Practice of Athletic Coaching (3). In this course, students gain knowledge in a variety of sub disciplines associated with coaching and how they fit within the structure of the discipline as a whole. Students are able to understand the importance of science and education as it pertains to coaching.

PET 5940r. Athletic Coaching Internship (1-3). Prerequisite: PET 5769. This course is for students to gain experience observing and working in a professional athletic coaching and sports setting. May be repeated to a maximum of three (3) credit hours.

PET 6087. Exercise Effect on Health and Quality of Life (3). This course consists of in-depth elaboration on current important professional issues related to exercise effects on health and quality of life.

PET 6217. Stress and Motor Performance (3). This course emphasizes the importance of stress within motor performance. Examines various physiological, cognitive, and behavioral correlates of psychologically induced stress as well as contemporary treatment modalities for managing stress.

PET 6224. Exercise Effect on Cognitive Processes and Brain Functioning (3). This course consists of in-depth elaboration on current important professional issues related to exercise effects on cognitive functions. Each session consists of two or three presentations followed by debates and discussions.

PSB 5066. Biological Bases of Learning and Behavior (3). This course is an overview of human biological development and its influence on learning and behavior with an emphasis on disorders of learning and development.

RCS 5080. Medical Aspects of Disability (3). This course offers an introduction to the U.S. medicine structure; a survey of medical specialties and terminology; as well as a survey of body systems, common malfunctions, therapeutic services, restorative techniques, and disability evaluations.

RCS 5250. Assessment in Counseling and Rehabilitation (3). This course offers an understanding of assessment approaches used with counseling and rehabilitation clients.

SDS 5820r. Internship (4-12). (S/U grade only). This course offers field practical experience in a planned setting. May be repeated to a maximum of eighteen semester hours.

SOW 5153. Human Sexuality (3). This course surveys issues and attitudes associated with human sexuality. It is primarily intended for social workers and other helping professionals who currently work with clients or plan to in the future. Using a biopsychosocial perspective, emphasis is placed on the social, cultural, familial, and individual differences in sexual and reproductive attitudes, values, and behavior. Students are introduced to common sex-related issues and to the particular concerns of various sexually discriminated against groups. Information is also provided about childhood sexual abuse and adult victimization and their relationship to intimacy issues clients typically present in direct practice.

SPS 5055. Foundations of School Psychology (3). This course introduces students to the field of school psychology including foci on role and function, historical perspectives, and legal, ethical, and professional standards issues. Provides an orientation to the nature of schooling and the relationship of schools to society and culture.

SPS 5105. Social-Emotional Disorders of Children and Adolescents: Characteristics and Assessment (3). This course is an overview of emotional, social, and behavioral disorders of children and adolescents with a focus on characteristics, classification, issues, and strategies in assessment.

SPS 5176. Psychoeducational Issues for ELL & Diverse Learners (3). This course focuses on creating culturally-competent, school-based, mental-health practitioners. Specific topics address cross-cultural assessment and consultation as well as psycho-educational issues related to ELL and diverse learners.

SPS 5191. Assessment of Intelligence (4). Prerequisite: Instructor permission. This course is an overview of assessment of intelligence and cognitive functioning including foci on theories of intelligence, assessment instruments and approaches, disorders related to cognitive functioning, and assessment of adaptive behavior. The course includes practice administration of assessment instruments with activities related to interpretation and reporting of assessment data.

SPS 5192. Psychoeducational Assessment and Intervention (4). Prerequisite: SPS 5191 or instructor permission. This course assesses educational problems utilizing standardized and non-standardized approaches, including foci on assessment of achievement and learning, preschool children, special populations, and assessment-based development of educational objectives and plans. The course includes activities related to collection, interpretation and reporting of assessment data.

SPS 5193. The Assessment of Socio-Emotional Problems in Children and Adolescents (3). Prerequisites: SPS 5105 and SPS 5191. This course focuses on activities related to the collection, interpretation, and reporting of assessment data of emotional, social, and behavioral problems in children and adolescents.

SPS 5205. Consultation in the Schools (3). Corequisite: MHS 6410. This course offers instruction and supervised experience in providing consultation to educators who are teaching students with behavioral and/or academic difficulties. Content includes an introduction to indirect models of service delivery, theories of consultation, consultative models, the process of consultation, systems level consultation, and ethics.

SPS 5207. Advanced School-Based Consultation (3). Prerequisite: SPS 5205. This course examines steps in the problem-solving process as it applies to the RtI/MTSS approach utilizing supplemental materials (e.g., assessment tools) and case studies based on real students. Existing skills in behavioral observation, interviewing, problem analysis, intervention selection, data graphing, assessing treatment integrity, and data-based decision making are refined and applied to the process of consultation within the schools. Furthermore, the course examines why problem-solving and RtI are natural extensions of school-based consultation, and the role of student support personnel (e.g., school psychologists) within RtI.

SPS 5615. Counseling Children and Adolescents (3). Prerequisite: Instructor permission. This course is an overview of counseling strategies used with children and adolescents and their parents and families.

SPS 5945r. Practicum in School Psychology (3-6). (S/U grade only). This course involves supervised experience in the delivery of school psychological services in schools and related settings. May be repeated to a maximum of twelve semester hours.

SPS 6948r. Internship in School Psychology (3-6). (S/U grade only). This course is an advanced supervised field experience in the delivery of school psychological services in an approved setting. May be repeated to a maximum of eighteen semester hours.

SYP 5105. Theories of Social Psychology (3). This course examines the major theoretical orientations in contemporary social psychology. Special attention is given to perspectives such as symbolic interactionism, social learning theory, expectation states/status characteristics theory, emotions work theory, and Goffman's dramatization theory.

Graduate Department of ELECTRICAL AND COMPUTER ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Website: <http://www.eng.famu.fsu.edu/ecee/>

Chair: Sastry Pamidi; **Associate Chair for Undergraduate Programs:** Bruce A. Harvey; **Associate Chair for Graduate Programs:** Md Omar Faruque; **Professors:** Andrei, Arora, L. DeBrunner, V. DeBrunner, Foo, H. Li, Meyer-Baese, Pamidi, Peng, Perry, Roberts, Weatherspoon, Yu; **Associate Professors:** Bernadin, Harvey, Kwan, Faruque; **Assistant Professors:** Anubi, Konstantinou, Y. Li, Moon; **Teaching Faculty I:** Chuy, Hadi, Hooker, Islam; **Teaching Faculty III:** Brooks; **Research Professor:** Lipo; **Courtesy Professors:** McGinnis, Steurer

The Department of Electrical and Computer Engineering offers programs leading to the Master of Science (MS) degree in electrical engineering and the Doctor of Philosophy (PhD) degree in electrical engineering. The MS program is designed to provide advanced coursework and experience in independent problem solving with a moderate degree of both breadth and specialization. The master's thesis and its defense provide for independent in-depth study of a current electrical engineering topic.

The PhD program is intended to provide students with an independent mastery of a significant portion of the field of electrical engineering. The PhD program prepares students for a career in industry, research, and/or teaching. Successful candidates must demonstrate, through original research, a substantial contribution to their field of specialty.

Areas of specialization in these programs generally coincide with the research interests of the faculty. Current specialization areas supported include computer engineering, computer security, electromagnetics, communications, digital signal processing and controls, power systems, power electronics, renewable energy, energy storage, energy conversion, robotics, and nanoelectronic engineering.

Facilities and Research Programs

Aeropropulsion, Mechatronics and Energy Center

The Aero-Propulsion, Mechatronics and Energy (AME) Center at Florida State University focuses on the development of transformational research programs to foster cross-cutting technologies while integrating with exemplary educational and professional training programs.

Center for Advanced Power Systems

The Center for Advanced Power Systems (CAPS), initially funded by the Office of Naval Research (ONR), is the preeminent center for multidisciplinary research, development, and education for advanced electrical power technologies serving electric ship transportation and utility systems. The Center has developed an academic-industrial consortium focused on recent advances in power areas such as smart grid, cyberphysical system security, semiconductors, materials, advanced controls, and superconductivity applied to power system technologies. CAPS is a nationally renowned research center in power systems technology built around extensive simulation capabilities that will provide both off-line and real-time simulation of power systems with high power hardware-in-the-loop-based testing capability.

Major equipment and facilities include multiple large scale real-time simulators such as RTDS, Opal-RT systems, a 5-MW dynamometer system, a 5-MVA AC-DC-AC converter, a 0-24kV 5MW MVDC system, a 200-kV impulse laboratory, a superconductor ac-performance evaluation laboratory, a centerwise multi-agent industrial control testbed, and two additional small laboratories.

Machine Intelligence Laboratory

The Machine Intelligence Laboratory with funding from the Department of Defense focuses on research in the areas of computer vision, pattern recognition, data mining, field-programmable-gate-array (FPGAs) for parallel computations, neural networks, evolutionary algorithms, biologically-inspired systems, and evolvable random number generators.

Applied Laser Laboratory

Applied Laser Laboratory involves development of novel materials for specific applications. This lab performs fundamental and applied research in areas including nano-structural materials and solid thin films growth and characterization, and photonic and chemical sensors fabrication and modeling. The accomplishments include development of metal oxide semiconductor nanobelts, insulator-semiconductor-superconductor thin films, wideband photodiodes, and chemical nano-sensors. The lab is equipped with excellent facilities including a pulsed laser deposition system consisted with an excimer laser and a vacuum chamber with multi-target rotator and RHEED probe.

Power Sciences Laboratory

Power Sciences Laboratory is a fully equipped facility for conducting new energy sources development and involves development of high energy and high power densities power sources including fuel cells, batteries, ultracapacitors, and hybrid power devices. The accomplishments include development of highest energy and power densities ultracapacitors, a method for enhancing the dielectric breakdown strength of polymer films, and novel monolithic hybrid fuel cells. The fundamental research includes understanding of the capacity degradation mechanisms in Li-ion and Li-polymer rechargeable batteries and development of theories for energy density of ultracapacitors and hybrid capacitors. The lab is equipped with four battery test systems, a fuel cell test system, AC impedance spectrometer, electronic load, surface analyzer, and glove box.

Electromagnetics Research Laboratory

The Electromagnetics Research Laboratory is a comprehensive research facility involved in studies of electromagnetics with emphasis on optical fiber technology and millimeter waves. The optics area of the laboratory investigates fiber-optic sensors and switches, high-resolution imaging systems, opto-mechanical and interferometric sensors, and optical fiber characterization. The millimeter waves area researches contactless material characterization, beam waveguides and open resonator techniques, mechanical and interferometric sensors, quasi-optics, and bioelectromagnetics. Other activities include microwave circuits and striplines, slot-lines, and antenna arrays. The laboratory is equipped with high-quality optical equipment including a precision reflectometer, an optical spectrum analyzer, lasers, detectors, power meters, optical benches, and translation gauges. The millimeter waves area has several state-of-the-art W-band (80 to 110 GHz) millimeter-wave sources, a high-resolution spectrum analyzer, detectors, and support equipment.

High-performance Computing and Simulation Research Laboratory

The High-performance Computing and Simulation (HCS) Research Laboratory focuses on research in advanced computer architectures, networks, systems, services, and applications for critical applications in reconfigurable, parallel, distributed, and fault-tolerant computing. This multi-university laboratory is headquartered in the ECE Department at the University of Florida (HCS-Gainesville), with the FAMU-FSU College of Engineering (HCS-Tallahassee) participating as a partner lab site. Both sites house key facilities linked by the Florida Lambda Rail. The lab has been cited by the NSA as a Research Center of Excellence in High-Performance Computing and Networking.

Activities focus on core areas in high-performance computer engineering whose contributions are critical for scalable, high-performance, dependable, and secure communications and computations far into the new century. Researchers address key issues that span the entire spectrum, from low-level hardware to grand-challenge applications, in a manner that emphasizes both theoretical and applied research to bring to fruition new concepts, models, techniques, and tools.

Information Processing and Transmission Engineering Research Laboratory

The research activities of the IPTEL group are oriented toward the convergence of information sensing, processing, and transmission. The goal is to address the many technical challenges in the design of seamless and integrated wireless sensors for practical applications. The latest research efforts are focused on two key areas: wireless sensor networks and signal processing. The thrust of the wireless sensor networks research efforts is to develop intelligent wireless sensor networks that exhibit swarm behavior. The main research topics currently being investigated include architectures, optimal protocols, data privacy, and fault tolerance for swarm-intelligent wireless sensor networks. The thrust of the signal processing research efforts is to develop innovative signal processing techniques and algorithms suited for automatic target detection, classification, and tracking. The emphasis is placed on approaches that are based on physical principles, detection theory, statistical techniques, multi-resolution signal processing, neural networks, genetic algorithms, and swarm intelligence.

Wireless Intercommunication Laboratory

The Wireless Intercommunication Laboratory, initially started and funded by the NASA Kennedy Space Center, studies wireless voice and data communication as an extension of the existing digital intercommunication system. The research engaged in the laboratory includes wireless communication systems, real-time embedded digital signal processing, spread-spectrum rapid synchronization, wireless network protocols, and error control coding. Other research conducted in the laboratory has focused on reliability of wired and wireless communication systems in the high lightning environment of the state of Florida.

The department also is an active contributor to the Florida Engineering Education Delivery System (FEEDS), which provides graduate education throughout the state of Florida using tutored video. A two-way television link between the College of Engineering and the Florida State University Panama City campus provides live, interactive instruction for students in the Panama City area and allows students in Tallahassee to benefit from faculty teaching on the Panama City campus.

Assistantships

Financial assistance often can be provided for graduate students through teaching or research assistantships and tuition fee waivers. Teaching assistantships involve assisting in the supervision of laboratory courses, grading, and related duties. Students awarded research assistantships participate in departmental or externally sponsored research projects under the guidance of a faculty member. Selection is competitive and is based upon potential for teaching (including language skills), Graduate Record Examinations (GRE) test scores, grade point average (GPA), and recommendations. Application for departmental financial assistance should be made directly to the graduate coordinator in the Department of Electrical and Computer Engineering.

Master of Science

Admission

To be considered for admission, candidates must have earned a bachelor of science degree (or equivalent) in electrical engineering, or a closely related discipline, from an Accreditation Board of Engineering and Technology (ABET)-approved program, a grade point average (GPA) of at least 3.0 on a 4.0 scale for all work attempted beyond sixty semester hours of undergraduate study, and a minimum score of 148 points for the quantitative section and 145 points for the verbal section of the GRE. GRE can be waived under special circumstances (please see the ECE website).

International candidates must also pass TOEFL and obtain a minimum of 80 on the Internet-based exam or 550 on the paper-based exam, or IELTS and obtain a minimum of 6.5 points.

Students with a bachelor's degree in a field other than electrical engineering may be required to complete a department-designated sequence of undergraduate courses with grades of "B" or better prior to attempting graduate electrical engineering work.

Students interested in obtaining a teaching assistantship should submit the TA/Grader Application Form as soon as they have been admitted to the program. Students who are not native speakers of English should take the speaking section of the TOEFL test (and obtain a score of twenty-six points or higher) or the SPEAK test at FSU (and obtain a score of forty-five points or higher) in order to be eligible to apply to for a teaching assistantship. More information about teaching assistantships can be found on the TA/Grader Application Form.

Course Work Requirement (Thesis)

Students must complete a minimum of thirty credit hours of course work to obtain the degree. The thirty credit hours should satisfy:

- Six credit hours should be from the list of core courses (see the Core Courses section for the list of core courses).
- At least three credit hours should consist of a course in advanced mathematics, typically a 5000-level course or above, or a departmental approved substitute.
- At least six credit hours of EEL 6971r (MS thesis).
- At least eighteen credit hours should be from letter grade courses.
- No DIS or supervised research is counted towards this degree.

Course Work Requirement (Non-Thesis)

Students must complete a minimum of thirty-three credit hours of course work to obtain the degree. The thirty-three credit hours should satisfy:

- Six credit hours should be from the list of core courses (see the Core Courses section for the list of courses).
- At least three credit hours should consist of a course in advanced mathematics, typically a 5000-level course or above, or a departmental approved substitute.
- At least twenty-four credit hours should be from letter grade courses.

Core Courses

All graduate students need to take at least two out of the following four core courses:

EEE 5317 Power Electronics (3)

- EEE 6353 Semiconductor Device Theory (3)
- EEL 5173 Signal and System Analysis (3)
- EEL 5764 Computer System Architecture (3)

Graduate Seminar

All full-time MS degree candidates are required to enroll in the graduate seminar, EEL 6932r, for each semester that they are enrolled in the graduate program. The details of the seminar are given under “Course Listing”.

Advisor and Supervisory Committee

Each student must identify an advisor (also called major professor) by the end of the first semester of course work and is required to submit a plan of study by the time he or she has completed twelve credit hours of graduate studies. The plan of study must be approved by the departmental Graduate Coordinator and the student’s advisor. The student’s advisor will also assist the student in forming the Student’s Supervisory Committee (also called thesis committee).

The Supervisory Committee of a master’s degree thesis program student must have at least three faculty members from the student’s home department with Graduate Faculty Status (GFS). Additional members may be added provided they have GFS in their home department. At least one Tallahassee campus faculty member with GFS must serve on a thesis committee chaired or co-chaired by a Panama City Campus faculty member. One Panama City Campus faculty member with GFS must be annually appointed by the ECE department chair to serve on the ECE graduate committee.

The chair of the Supervisory Committee must be granted the privilege of chairing master’s level thesis committees prior to the student’s defense of his or her thesis. Granting of this privilege requires an affirmative majority vote of the GFS faculty of the department and approval by the department chair. Faculty holding this privilege will be reviewed periodically by the department chair. Those not meeting performance expectations may have this privilege revoked upon recommendation of the department chair, an affirmative majority vote of the GFS faculty of the department, and approval of the academic dean.

Thesis Requirements (Thesis)

All Master of Science (MS) thesis program students must complete a written thesis. Upon completion of the thesis, an oral defense is required, which consists of a public presentation of the student’s work to the department and the student’s supervisory committee. Students must register for EEL 8976, Master’s Thesis Defense, during the semester they plan to graduate. The thesis should be in the hands of the major professor and the examining committee at least ten days before the date of the oral examination.

It is the student’s responsibility to post the thesis defense announcement within the department and the College of Engineering at least one week prior to the defense. The announcement should include: thesis title; student’s name; student’s department; major professor and committee members; date, time and location of student’s defense.

Master’s Comprehensive Exam Requirements (Non-Thesis)

All students in the non-thesis MS degree program must register for and successfully pass the Master’s Comprehensive Exam, EEL 8966. The students must apply to take the examination in the Department of Electrical and Computer Engineering office by the end of the prior semester. A maximum of two attempts will be permitted.

The exam is taken over a five-week period. In preparing for the examination, the student shall present a forty-page literature review report to a committee demonstrating an understanding of the theoretical framework in a given area of research based on an in-depth literature review. In demonstrating an understanding of the literature, the student must include a discussion that identifies the state-of-the-art and knowledge gaps in that area. Upon submission of the literature review report, the committee will respond to the student with questions related to the report itself and the area of research. The following is a schedule of events for the successful completion of the examination:

- The student must make arrangements with the advisor to schedule a five-week time period for the examination. The examination committee should contain at least three faculty members with GFS status from the ECE Department.
- With the consultation of the advisor, the student will submit a research review report to the examination committee. This document should abide by the format of each university’s PhD thesis and the topic should be determined by the student and major advisor. The student is encouraged to submit the research review report by the middle of the semester for which he/she registered for the Preliminary Examination. The student should abide by the IEEE plagiarism policy.

- The committee will submit written questions to the advisor for collection by the student two weeks after submission of the research review report. These questions will relate to the research review report.
- The student will have two weeks to develop written responses to the questions in preparation of the oral exam. These responses will be submitted to the advisor, who will then distribute the responses to the committee members. The student should submit a complete bound set of answers to each committee member.
- The oral examination will be held within one week of submission of the written responses. This examination will be primarily related to the research area and the student’s written responses. Appropriate related fundamental concepts may also be covered.
- Pass/Fail is determined on the combined written and oral responses to committee questions. A majority of committee votes and a pass vote by the committee chair is required to pass.

Transfer Credits

A maximum of six semester hours of graduate courses not counted toward a previous degree from another regionally accredited graduate school may be transferred from another academic institution(s) to the student’s current master’s degree program, with the approval the ECE Departmental Graduate Committee. A grade of “B” or better is required in all transferred coursework.

Doctor of Philosophy

Admission

To be considered for admission, candidates must have earned a bachelor’s degree or a master’s degree (or equivalent) in electrical engineering, or in a closely related discipline, from an Accreditation Board of Engineering and Technology (ABET)-approved program, a grade point average (GPA) of 3.3 on a 4.0 scale on all baccalaureate coursework and any graduate work attempted, and a minimum score of 151 points for the quantitative section and 145 points for the verbal section of the GRE.

International candidates must also pass TOEFL and obtain a minimum of 80 on the Internet-based exam or 550 on the paper-based exam or pass IELTS and obtain a minimum of 6.5 points.

Students with a bachelor’s degree in a field other than electrical engineering may be required to complete a department-designated sequence of undergraduate courses with grades of “B” or better prior to attempting graduate electrical engineering work.

Students interested in obtaining a teaching assistantship should submit the TA/Grader Application Form as soon as they have been admitted to the program. Students who are not native speakers of English should take the speaking section of the TOEFL test (and obtain a score of twenty-six points or higher) or the SPEAK test at FSU (and obtain a score of forty-five points or higher) in order to be eligible to apply to for a teaching assistantship. More information about teaching assistantships can be found on the TA/Grader Application Form.

Course Work Requirement

The course work requirement depends on the previous degree obtained by the student. Thus, we distinguish five tracks:

- BS-to-PhD: if the student has a BS degree in EE or related areas.
- MS/EE-to-PhD: if the student has a MS degree in electrical engineering or equivalent.
- MS-to-PhD: if the student has a MS degree in Physics, Mathematics, or other Engineering Fields.
- MS/Thesis-to-PhD: if the student has a MS degree in EE from the FAMU-FSU College of Engineering and has graduated with the thesis option.
- MS/Non-Thesis-to-PhD: if the student has a MS degree in EE from the FAMU-FSU College of Engineering and has graduated with the non-thesis option.

The default track for students enrolling in the PhD program is BS-to-PhD. PhD students that want to follow a different track need to fill in PhD Track Approval Form at the beginning of their program. The number of credits required for each of the five tracks is summarized in the table below:

From: To:	BS PhD	MS/EE PhD	MS PhD	MS/Thesis PhD	MS/Non-Thesis PhD
Core Courses	6	6	6	0	0

Electives (could be inside or outside department)	21	6	12*	3	0
Supervised Research		3	3	3	3
Dissertation Hours	24	24	24	24	24
Total	51	39	45	30	27

*Up to six credit hours can be 4000-level courses, however, they will not be counted towards the calculation of GPA.

Graduate Seminar Requirement

All full-time PhD candidates are required to enroll in the graduate seminar, EEL 6932r, for each semester that they are enrolled in the graduate program.

In addition, all the PhD candidates need to make at least one oral presentation about their research in the Graduate Seminar, after passing the PhD Preliminary Examination and before graduation.

Advisor and Supervisory Committee

The Graduate Director is by default the initial advisor of all incoming graduate students. However, students are strongly encouraged to select another advisor among the current faculty members as soon as they arrive in the ECE Department by filling in the Advisor Form. The student should be in contact with the advisor on a regular basis and all the decisions related to the course work and the plan of studies development of the student should be approved by the advisor. The student's advisor also will assist the student in forming the Student's Supervisory Committee (also called dissertation committee) by the end of the first year of studies.

The Supervisory Committee of a doctoral degree thesis program student must have at least four members with Graduate Faculty Status (GFS). Three of the four members must be faculty members from the student's home department. The fourth member, the University Representative, must be a tenured member of the faculty holding GFS from outside the ECE department.

The chair of the Supervisory Committee must have experience in chairing a master's thesis committee or serving on a doctoral dissertation committee prior to earning the privilege of chairing a dissertation committee. Granting of this privilege requires an affirmative majority vote of the GFS faculty of the department and approval by the department chair. Faculty holding this privilege will be reviewed periodically by the department chair. Those not meeting performance expectations may have this privilege revoked upon recommendation of the department chair, an affirmative majority vote of the GFS faculty of the department, and approval of the academic dean. FSU Panama City Campus faculty with GFS cannot serve as a chair of a doctoral dissertation committee.

PhD Preliminary Examination

The Preliminary Examination is the final requirement for doctoral candidacy. This exam is taken over a five-week period. It must be successfully completed by the student's fourth semester (for the BS-to-PhD track), or third semester (for all the other tracks). The student is allowed to retake the exam only once.

In the semester the student intends to take the Preliminary Examination, he/she needs to register for the zero-credit hour EEL 8964 (Prelim Exam). This registration must be done only once.

The exam is taken over a five-week period. In preparing for the examination, the student shall present a forty-page literature review report to a committee demonstrating an understanding of the theoretical framework in a given area of research based on an in-depth literature review. In demonstrating an understanding of the literature, the student must include a discussion that identifies the state-of-the-art and knowledge gaps in that area. Upon submission of the literature review report, the committee will respond to the student with questions related to the report itself and the area of research. The following is a schedule of events for the successful completion of the examination:

- The student must make arrangements with the advisor to schedule a five-week time period for the examination. The examination committee should contain at least three faculty members with GFS status from the ECE Department.
- With the consultation of the advisor, the student will submit a research review report to the examination committee. This document should abide by the format of each university's PhD thesis and the topic should be determined by the students and major advisor. The student is encouraged to submit the research review report by the middle of the semester for which he/she registered for the Preliminary Examination. The student should abide by the IEEE plagiarism policy.

- The committee will submit written questions to the advisor for collection by the student two weeks after submission of the research review report. These questions will relate to the research review report.
- The student will have two weeks to develop written responses to the questions in preparation of the oral exam. These responses will be submitted to the advisor, who will then distribute the responses to the committee members. The student should submit a complete bound set of answers to each committee member.
- The oral examination will be held within one week of submission of the written responses. This examination will be primarily related to the research area and the student's written responses. Appropriate related fundamental concepts may also be covered.
- Pass/fail is determined on the combined written and oral responses to committee questions. A majority of committee votes and a pass vote by the committee chair is required to pass.
- After the examination is completed the Preliminary Examination Report Form should be filled and submitted to the ECE Graduate Coordinator. A student who passes the examination will be recognized as a candidate for the PhD Degree.

Prospectus Examination

After passing the PhD Preliminary Examination, the student should pass the Prospectus Examination. This examination is usually passed by the end of the third year and needs to take place at least eight months before the graduation date. The student must submit a Prospectus Examination Application/Approval Form to the ECE Graduate Committee. The student's advisory committee administers this exam, which may be in the form of a written or a combination of written and oral examination. The content and scope of the exam are at the discretion of the committee. The Prospectus Examination represents the defense of the Dissertation Proposal.

Dissertation Defense Announcement

It is the student's responsibility to post the dissertation defense announcement within the department and the College of Engineering at least two weeks prior to the defense. The announcement should include: dissertation title; student's name; student's department; major professor and committee members; date, time, and location of student's defense. Academic courtesy requires that the dissertation be submitted to each member of the supervisory committee at least four weeks before the date of the oral examination.

Dissertation and Defense

The PhD dissertation must be an achievement in original research constituting a significant contribution to knowledge and represent a substantial scholarly effort on the part of the student. It is the responsibility of the major professor to supervise the preparation of the prospectus and the dissertation. The manuscript must be prepared according to the style and form prescribed by the department and must conform to the University requirements regarding format.

The student must submit a PhD Presentation and Defense Application/Approval Form to the ECE Graduate Committee. Please refer to the Graduate Student Handbook from your university for further details.

The defense of the dissertation will be oral. All committee members and the student must attend the entire defense in real time, either by being physically present or participating via distance technology.

Transfer Credits

A maximum of six semester hours of graduate courses not counted toward a previous degree from another regionally accredited graduate school may be transferred from another academic institution(s), with the approval of the ECE Graduate Committee. A grade of "B" or better is required in all transferred coursework.

Journal Paper Submission Requirement

All PhD students are required to publish, or have accepted for publication at least one refereed article to a journal in their field of interest before their graduation will be approved.

Definition of Prefixes

EEE—Engineering: Electrical and Electronic

EEL—Engineering: Electrical

Graduate Courses

EEE 5280. Biomimetic Systems Theory (3). Prerequisite: Graduate standing or instructor permission. This course covers natural systems and signal-processing theory as revealed by biological sensory systems. Focus is on innovative engineering applications inspired by nature sensory systems. Application of the biomimetic theory is reinforced through a course project which demonstrates successful mimicry of a natural sensory system concept.

EEE 5315. Digital Integrated Circuit Design (3). Prerequisite: EEL 4301. This course covers the design of integrated circuits, applications, solid-state-device switching characteristics, memory, computer-aided design, and layout.

EEE 5317. Power Electronics (3). Prerequisites: EEE 3300 and EEL 3135. This course helps students develop a basic understanding of using switched electronic circuits for the conversion and regulation of electric power. The course focuses on basic converters and their steady state analysis and covers dynamic-modeling analysis, converter-controller design, power-semiconductor device, and converter simulation.

EEE 5333. Solid State Sensors (3). Prerequisite: EEE 3300. This course covers the fabrication of solid-state sensors, their characterization, operational principles, and applications for acoustic, mechanical, magnetic, radiation, thermal, chemical, and biologic sensors.

EEE 5378. Mixed Signal Integrated Circuits (3). Prerequisite: EEL 5315. This course introduces mixed-signal processing using analog and digital integrated circuits. The course covers fundamentals of sampled data systems, nonlinear and dynamic analog circuits, Nyquist-rate data converters, over-sampling data converters, and digital filters, as well as the use of computer-aided design programs.

EEE 5452. Analysis of Quantum Scale Semiconductor Devices (3). Prerequisite: Graduate standing or instructor permission. This course presents techniques for the analysis and simulation of nanometric-scale semiconductor devices (SDs), and focuses on the analysis of quantum-induced effects on the electronic transport and characteristics of SDs. The course covers generation-recombination processes in semiconductors, quantum and semiclassical modeling of SDs, noise and fluctuations in SDs, and numerical techniques for the simulation of SDs.

EEE 5542. Random Processes (3). Prerequisites: EEL 3135 and EEL 4021. This course covers topics such as random processes; analysis and processing of random signals; modeling of engineering systems by random processes; selected applications in detection; filtering; reliability analysis; and system performance modeling.

EEE 5557. Radar (3). This course introduces basic concepts of radar systems including radar range equation, radar cross section calculations, random processes and noise, array antennas, beamsteering, and doppler and range processing. FM and CW systems, pulse compression, synthetic aperture radar, and clutter also are covered.

EEE 5776. Machine Learning (3). Prerequisites: Knowledge of Linear Algebra, Signals and Systems, and Statistical Topics, and instructor permission. This course is designed for first-year graduate students from engineering disciplines and introduces students to the theory and engineering applications of machine learning including neural networks, fuzzy logic, genetic algorithms, supervised and unsupervised learning algorithms. This course places emphasis on engineering applications in controls, power systems, and robotics.

EEE 6353. Semiconductor Device Theory (3). Prerequisite: EEE 3300 or equivalent. This course covers elementary quantum physics, energy-band theory, carrier properties, theory of p-n junctions, optoelectronics diodes, bipolar junction transistors, and field-effect transistors.

EEE 6502. Digital Signal Processing I (3). Prerequisite: EEL 5173. This course discusses the fundamentals of digital signal processing and design of a variety of digital processors and filters. Introduction to DFT-FFT and spectral estimation theory and practice.

EEL 5025. Computational Electrical Engineering (3). Prerequisites: CGS 3408, EEL 3135, EEL 3472, EEL 3512, and EEE 3300. This course covers a broad range of computational methods and their applications to electrical engineering. Methods include solution of equations, matrices, differentiation, integration, solution of differential equations, Fourier analysis, and boundary-value problems. Applications include circuit analysis, signal processing, electromagnetics, and optics.

EEL 5173. Signal and System Analysis (3). Prerequisite: EEL 3135 or EEL 4652. This course focuses on continuous and discrete dynamic models with an emphasis on state variable models; Laplace transform, z-transform, and the time domain solutions. Includes real-time digital simulation and sampling theory.

EEL 5247. Power Conversion and Control (3). This course introduces solid-state power conversion and control circuits, including analysis and design of nonlinear multiple-phase circuits with sinusoidal and non-sinusoidal variables; constant-frequency and variable-frequency input converters; variable-frequency inverters; sensing and processing circuits supporting control systems; and embedded microprocessor control systems.

EEL 5250. Power Systems Analysis (3). This course examines power system planning and operational problems. Subjects covered include load flow, economic dispatch, fault studies, transient stability, and control of problems. System modeling and computer solutions are emphasized through class projects.

EEL 5270. Power System Transients (3). Prerequisite: EEL 4213. In this course, topics include electrical transients in power systems; study of time domain, frequency domain and traveling wave techniques for transient analysis; study of switching transients associated with loads, capacitors, faults, line reclosing and single-pole switching; study of interaction between lighting and power systems; introduction to insulation coordination.

EEL 5285. Renewable Energy Generation I (3). This course is an introduction to renewable energy generation. Topics covered include smart grid system, hybrid electric vehicle, and grid-connected PV inverters. Emphasis is placed on the energy conversion techniques applied in the renewable energy source and energy storage elements.

EEL 5286. Renewable Energy Generation II (3). This course is an introduction to renewable energy generation. Topics covered include smart grid system, hybrid electric vehicle, and grid-connected PV inverters. Emphasis is placed on the energy conversion techniques applied in the renewable energy source and energy storage elements.

EEL 5288. Integration of Distributed Generation (3). Prerequisite: EEL 3216. This course introduces the concept of integration of alternate renewable resource based power generation technologies known as 'Distributed Generation'. The course familiarizes students with various DG sources such as Wind, Solar, Hydro, Wave and Tidal, Geothermal, and Bio-fuel based energy generation technologies, however, PV and wind technologies are studied in details. The course also covers the modeling and simulation of distribution networks, modeling of PV and wind technologies, their integration technologies with the grid, possible impacts on grid due to the integration of DG, tariffs (feed-in tariff, net-metering etc.) for DG integrations, impact of variability, microgrids and its controls, IEEE interconnection standards etc.

EEL 5416. Sonar (3). Prerequisites: EEL 3473 and EEL 3512. This course introduces basic concepts of sonar systems including acoustic propagation, transducers and projectors, target strength, reverberation, beamsteering, beamforming, beam patterns, and synthetic aperture sonar.

EEL 5426. RF/Microwave Circuits I (3). Prerequisite: Graduate standing or instructor permission. This is an introduction to passive RF/microwave circuit design. Topics include distributed transmission line theory; lumped circuit and network analysis; impedance matching; and the design of various microwave components such as filters, couplers, detectors and mixers.

EEL 5427. RF/Microwave Circuits II (3). Prerequisite: Graduate standing or instructor permission. This course focuses on active RF/microwave design. Topics include two-port characterization of RF/microwave transistors; matching networks; RF/microwave transistor amplifier design using low-noise, high-gain, broadband and high-power design methods; and RF/microwave transistor oscillator design.

EEL 5454. Optical Sensors (3). Prerequisite: EEL 3512, EEL 3473 or equivalent. This course examines the basic concepts of optical sensors and essential optics. Topics include intensity, phase, and frequency modulated optical fiber sensors and their applications; distributive sensing systems; and optical fibers in signal processing.

EEL 5465. Antenna Theory (3). Prerequisite: EEL 3473 or EEL 4461. This course covers topics such as electromagnetic fields; radiation from simple sources and apertures; receiving antennas; arrays-uniformly spaced, non-uniform, pattern synthesis; cylindrical antennas and arrays; radiation from conical and spheroidal structures; slot antennas; open waveguides and small horns.

EEL 5486. Advanced Electromagnetic Theory (3). Prerequisite: EEL 3473. This course discusses advanced concepts and theorems in electromagnetic fields; plane, cylindrical, and spherical wave functions; perturbation and variational techniques; microwave networks.

EEL 5500. Digital Communication Theory (3). Prerequisite: EEL 4514. This course examines principles of modern digital communication systems including pulse-code modulation, error-control coding, optimal signal protection, and information theory.

EEL 5563. Optical Fiber Communications (3). This course is a review of the characteristics of basic optical components for optical communications systems, e.g., optical fibers, light sources, optical detector and fiber connectors; signal degradation in optical fibers; optical analog and digital communication systems; coherent optical fiber communications.

EEL 5590. Advanced Topics in Communication (3). This course is designed to provide an in-depth knowledge of some of the advanced topics in communications. Topics covered include ideal communication systems; signal to noise ratio (S/N) for amplitude and angle modulation; design of systems to improve S/N ratio; satellite and mobile communication.

EEL 5591. Wireless Communications and Networking (3). Prerequisites: EEL 3135, EEL 4021, EEL 4514; "C" programming or equivalent. This course covers the fundamentals of wireless communications and systems. The core topics include radio-wave propagation characteristics of wireless channels; modulation and demodulation techniques for mobile radio; reception techniques for wireless systems; fundamentals of cellular communications; multiple access techniques; wireless networking; and hybrid networking of a wireless system and the Internet.

EEL 5667. Robot Kinematics and Dynamics (3). Prerequisite: EEL 4652. This course is an introduction to robot kinematics and dynamics, including forward kinematics, inverse kinematics, and differential kinematics. Also covers rigid motion and homogenous transformations, velocity and force/torque relations and resolved motion rate control; serial, parallel and kinematically redundant manipulators.

EEL 5707. ASIC Systems Design I (3). Prerequisite: EEL 3705. This course is an introduction to Application Specific Integrated Circuit (ASIC) families. Overview of programmable ASICs. Introduction to the VHDL design entry and simulation language. Programmable ASIC design methodology is introduced.

EEL 5722. Digital Signal Processing with Field Programmable Gate Arrays (3). Prerequisite: Graduate standing. This course is a review of Field Programmable Gate Arrays (FPGAs), HDL, mathematics, signals and systems. Computer arithmetic concepts, DSP system design of FIR filters, IIR filters, DFT, FFT, and wavelets filter banks are also covered.

EEL 5764. Computer System Architecture (3). Prerequisites: EEL 3705 and EEL 4746. This course is a comprehensive study of computer organization, Von Neumann computer architecture, and the principles of RISC computer architecture and its future outlook.

EEL 5784. Computer Network Design and Analysis (3). Prerequisite: Graduate standing or instructor permission. This is a first course in the fundamentals of computer network design and analysis. The course presents network architecture using a layered approach. Analysis and examples of network protocols and standards and techniques for evaluating network performance and selecting appropriate network protocols are covered.

EEL 5812. Advanced Neural Networks (3). Prerequisite: EEL 4810. This course is designed to provide students with an in-depth knowledge of advanced topics in neural networks such as universal approximation networks, transformation-based neural networks, information theoretic models, and foundations of neurodynamics.

EEL 5905r. Directed Individual Study (1–3). (S/U grade only). Prerequisite: Instructor permission. Students can enroll in EEL 5905 during multiple semesters and take at most 9 credits per semester, however, these credits cannot be used towards the minimum credit requirement for the MS or PhD degrees.

EEL 5910r. Supervised Research (1–5). (S/U grade only). Prerequisites: Graduate standing and departmental approval. This course cannot be used as credit toward degree. May be repeated to a maximum of three semester hours for candidates in master's degree, and five semester hours for candidates in doctoral degree.

EEL 5930r. Special Topics in Electrical Engineering (3). This course examines special topics in electrical engineering at the graduate level with emphasis on recent research and developments. Content, credit, and prerequisites vary; consult instructor. May be repeated to a maximum of twelve semester hours.

EEL 5940r. Supervised Teaching (1–5). (S/U grade only). Prerequisites: Graduate standing and departmental approval. Cannot be used as credit toward degree. May be repeated to a maximum of three semester hours for candidates in master's degree, and five semester hours for candidates in doctoral degree.

EEL 6237. Modern AC Drives (3). Prerequisite: EEL 4220. This course offers an advanced study of AC drives. Topics covered include pulse-width modulation, drive system modeling, and vector controls. Emphasis is placed on the drives of induction and synchronous machines.

EEL 6266. Power Systems Operation and Control (3). Prerequisite: EEL 5250. This course examines modern power system operational and control problems and solution techniques, including state estimation, contingency analysis, load-frequency control, and automatic generation control. Additional subjects covered include load-flow analysis, unit commitment, and external equivalents for steady-state operations.

EEL 6930r. Special Graduate Topics in Electrical Engineering (3). This course explores special topics in electrical engineering at the graduate level with emphasis on recent research and developments. Content, credit, and prerequisites vary—consult instructor. May be repeated to a maximum of twelve semester hours.

EEL 6932r. Electrical and Computer Engineering Seminar (0). (S/U grade only). May be repeated a maximum of ten times. Presentations by faculty, students and visiting scholars. All full-time graduate students must enroll each semester.

EEL 6971r. Master's Thesis Research (1-12). Prerequisites: Graduate standing and instructor permission. This course provides a means of registering for thesis research work and recording progress towards its completion. Student must consult with the academic department for appropriate registration of course credit hours.

EEL 6980r. Dissertation (1–12). (S/U grade only). May be repeated to a maximum of forty-eight semester hours.

EEL 8964r. Preliminary Doctoral Examination (0). (P/F grade only.) May be repeated one time.

EEL 8966r. Master's Comprehensive Examination (0). (P/F grade only.) May be repeated a maximum of two times.

EEL 8976. Master's Thesis Defense (0). (P/F grade only.)

EEL 8985r. Dissertation Defense (0). (P/F grade only.) May be repeated to a maximum of three times.

Graduate Department of ENGLISH

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.english.fsu.edu/>

Chair and Pryor Professor in Shakespearean Literature: Gary Taylor; **Krafft**

Professors: Robert Butler, A.E.B. Coldiron; **Kellogg W. Hunt Professor:** Kathleen Yancey; **Francis Cushing Ervin Professor:** Aaron Jaffe; **George Mills Harper Professor:** Judith Pascoe; **Bertram H. Davis Professor:** Bruce Bohrer; **Janet Burroway Professor:** Mark Winegardner; **Robert O. Lawton Distinguished Professors:** S.E. Gontarski, David Kirby; **Professors:** *Bourus, Caputi*, Coldiron, Edwards, Epstein, Faulk, Fleckenstein, Goodman, Johnson, Kimbrell, Gregory, Montgomery, Roberts, Stuckey-French, Suarez, Ward; **Associate Professors:** Dominguez Barajas, Gaines, Gants, Gardner, Horack, Kennedy, Kilgore, Lathan, Laughlin, Neal; **Assistant Professors:** Della Gatta, Eckert, Fiscus-Cannaday, Garcia, Howard, Mariano, Maurette, Parker-Flynn, Ribo, Stilling, Tran; **Senior Lecturers:** Hamby, Schacochis; **Associate Lecturers:** Hand, Howell; **Professors Emeriti:** Berry, Bickley, Burke, Burroway, Crook, Fenstermaker, Lhamon, McElrath, O'Rourke, Ortiz-Taylor, Rowe, Walker

The Department of English offers work leading to the Master of Arts (MA), Master of Fine Arts (MFA), and Doctor of Philosophy (PhD) degrees. Reflecting its transformation from the Florida State College for Women into a comprehensive research institution at the close of World War II, Florida State University offered its first MA in English in 1945 and its first PhD in 1955. In the subsequent years, hundreds of Florida State University English students have taken postgraduate degrees and have filled teaching, research, administrative and post-doctoral positions in colleges and universities across the nation. Our postgraduate students have also accepted positions of responsibility and leadership in publishing, consulting, the public sector, private foundations, journalism and other areas of employment where research skills, rigorous analysis, and good writing are valued. During a period of rapid transition and accelerated change in the fields of literary, rhetorical and cultural studies, as well as in creative arts, we retain our offerings in traditional historical periods, developing those in diverse world literatures, while also fully engaging with the spectrum of current theoretical approaches in literatures, media and creative arts. Florida State University is also widely recognized as a growing player in the fields of digital humanities and the History of Textual Technologies, and much of that initiative comes from faculty and graduate students in the department of English. Such efforts in contemporary and traditional graduate study are overseen by an internationally renowned faculty.

Trained at premier research institutions throughout North America and Europe, faculty members—including one Eppes Professor and two Robert O. Lawton Distinguished Professors—are award winning teachers and internationally recognized scholars. Over twenty-five faculty members have won University-wide teaching awards and one currently holds the title of University Distinguished Teaching Professor. In addition to prize-winning original fiction, poetry, and essays, creative writing faculty also produce nationally acclaimed textbooks in both fiction and poetry that have an impact on writing students across the nation. Faculty research regularly appears in books published by distinguished university presses around the globe, as well as in the foremost professional journals, such as *Publications of the Modern Language Association (PMLA)*, *African-American Review (AAR)*, *English Literary History (ELH)*, *Review of English Studies (RES)*, *Multi-Ethnic Literature of the United States (MELUS)*, *Digital Scholarship in the Humanities (DSH)*, *American Literature (AL)*, *The Journal of Advanced Composition (JAC)*, *English Literary Renaissance (ELR)*, the *Journal of English and Germanic Philology (JEGP)*, *Modernism/modernity (M/m)*, *Journal of Modern Literature (JML)*, and *Modern Drama (MD)*.

Candidates for the MA, MFA, and PhD degrees emphasize literature, media, and culture; creative writing; or rhetoric and composition, but the department offers coursework and degree options in a number of related fields such as popular culture, folklore, and critical theory. The English department is home to the History of Text Technologies, an innovative interdisciplinary program which combines studies in histories and theories of the book and of media cultures. Students can take the History of Text Technologies as an area of concentration for the MA and PhD.

For the MA degree, students elect literature, media, and culture or rhetoric and composition concentrations. Master's students in literature, media, and culture must defend a Capstone Master's Essay. Master's students in rhetoric and composition can either defend a thesis or submit and defend a portfolio. Master of Fine Arts students submit and defend a creative thesis. All PhD students satisfy core requirements in literature, research methods, language study, and literary theory; students then take comprehensive preliminary ex-

aminations and present dissertations based on a set of major and minor areas described below. A special feature of the Florida State University program is that students may present a body of creative work for the dissertation.

The teaching apprenticeship program is a strong feature of the department's graduate program. Each year the department appoints a number of graduate teaching assistants (TAs) who normally teach two sections each semester, usually of freshman English (advanced graduate students in all fields also teach introductory literature courses), in addition to enrolling in at least nine semester hours of coursework. Faculty supervisors support these teachers in their work. New TAs participate in a teacher-training program during the summer term preceding their appointment, for which they receive a modest stipend. Faculty specialists in rhetoric and composition conduct this program and train teachers not only for classroom instruction but also for tutorials and writing clinics in the department's **Reading/Writing Center** and two digital studios. Moreover, two computerized classrooms and two laptop-ready classrooms allow graduate students to teach computer-assisted writing.

The department also publishes two literary magazines, *The Kudzu Review* and *The Southeast Review*, and faculty members regularly edit scholarly journals. Many students also gain journalistic experience by writing for the independent campus newspaper. The creative writing concentration program sponsors weekly literary readings through the Jerome Stern Distinguished Writers Series. Each year, the literature faculty sponsors the English Colloquium, which features lectures by Florida State University and invited lecturers who present their most recent scholarship. Graduate students offer their scholarly research at various university-sponsored colloquia.

Each year students in the department hold Legacy Fellowships, Dissertation Research Fellowships, or Kingsbury Writing Scholarships. In addition, minority students often hold the Leslie N. Wilson-Delores Auzenne Assistantship or McKnight Fellowships. The department annually recognizes outstanding achievements among its students in both teaching and scholarship with the following awards and honors: the Bertram and Ruth Davis Award for Outstanding Graduate Career; the Robert O. Lawton Award for Excellence in Teaching First Year Composition; the Fred L. Standley Award for Most Effective Teacher Among Graduate Assistants; the Marian C. Bashinski Award for Excellence in Teaching First Year Composition; the Bryan Hall Award for Excellence in Teaching First-Year Composition; the Bertram and Ruth Davis Award for Outstanding Dissertation in English Literature, Criticism, Linguistics or Rhetoric; the J. Russell Weaver Award for Outstanding Dissertation in American Literature; the John Mackay Shaw Academy of American Poets Graduate Award; the Sassaman Graduate Creative Writing Award; the Sassaman Graduate Critical Award; the Edward H. and Marie C. Kingsbury Fellowship Award and the Adam Johnson Fellowship to support a creative writer's research project.

Application Deadlines

Students are admitted to begin coursework in the Fall term. To be considered for Fall admission, completed applications must be on file in the Department of English by the January deadline established on the English department Web site.

College Requirements

Please review all college-wide degree requirements in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Master's Programs in English

Admission to the program is determined by a departmental committee and normally requires: 1) an undergraduate major in English, or its equivalent, ordinarily with an upper-level average of at least 3.0; 2) Graduate Record Examination (GRE) scores; verbal scores in the 86th percentile range are typical among successful candidates; 3) three letters of recommendation assessing the applicant's potential to do master's level work in English; and 4) a writing sample. **These are minimum criteria and meeting them does not guarantee admission.**

A candidate for the Master of Arts (MA) in English may elect to emphasize literature, media, and culture, or rhetoric and composition. To ensure that students have ready assistance in shaping a program designed to meet their needs and in planning a course of study which will meet the requirements of their particular emphasis, all students are expected to consult their advisors every term. The Vice Chair for Graduate Studies in English will serve as advisor to all first-term master's candidates or until another advisor is chosen.

To complete the Master of Arts (MA) or Master of Fine Arts (MFA) in English, students must satisfy the following requirements:

1. Earn thirty-three credit hours for the Master of Arts (MA) or forty-five credit hours for the Master of Fine Arts (MFA) with an overall GPA of 3.0 or better in approved courses, as described below, for each emphasis;
2. Satisfy a foreign language reading requirement demonstrated by certification by the appropriate language department, or completion of twelve semester hours in a foreign language with an average grade of at least 3.0, or four years of a single language in high school. (MFA students are exempt from this requirement);
3. Satisfactorily complete a final requirement as follows:
 - a. Students emphasizing literature, media, and culture must satisfactorily complete and defend a Capstone Master's Essay;
 - b. Students emphasizing rhetoric and composition must satisfactorily complete and defend a thesis or present and defend a portfolio;
 - c. Students in the Master of Fine Arts (MFA) degree program must satisfactorily complete and defend a creative thesis.

At least twenty-seven semester hours for the Master of Arts (MA) or at least thirty-three for the Master of Fine Arts (MFA) must be taken on a letter-grade basis. With the permission of the Vice Chair for Graduate Studies, up to six elective hours may be taken in directed individual study (ENG 5906r). Of the courses with LAE prefixes (professional courses in college-level teaching), only LAE 5370 may be used to fulfill course requirements at the master's level; students in the rhetoric and composition track only can also count LAE 5946 toward the degree.

A student entering the program from another master's program may be permitted to transfer up to six semester hours of credit. When a student's background is deficient, the department may require additional work beyond the minimum requirement for the master's degree.

Master's Program in English with an Emphasis in Literature, Media, and Culture

Master's students who choose to emphasize literature, media, and culture will complete thirty-three semester hours of coursework, to include the following:

1. ENG 5079 Issues in Literary and Cultural Studies;
2. One course pre-1600;
3. One course pre-1800;
4. One additional course 1660–1900
5. One literature course whose chief organizing principle is the study of alterity, such as race, class, gender, sexual orientation, ability or ethnicity. In this one instance the course fulfilling this requirement may, as well, fulfill another.
6. Eighteen additional hours of coursework, six of which may, with the permission of the Vice Chair for Graduate Studies in English, be outside the department.

As a final requirement, students emphasizing literature must enroll in ENG 5835 (Topics in Publishing: Professional Research and Writing) and complete and defend a Capstone Master's Essay.

Master's Program in English with an Emphasis in Rhetoric and Composition

Master's students who choose to emphasize rhetoric and composition will complete thirty-three semester hours of coursework, to include:

1. At least twelve hours of coursework in rhetoric and composition, from the following: ENC 5700, 5720; ENG 5028; LAE 5370, 5946; and ENG 5933 or ENG 6939 when the topic is rhetoric and composition;
2. Six hours of thesis credit;
3. ENG 5079 Issues in Literary and Cultural Studies;
4. Twelve additional hours of coursework.

Master of Fine Arts (MFA) in English with an Emphasis in Creative Writing

Students who wish to obtain the Master of Fine Arts (MFA) in Creative Writing must complete forty-five semester hours of coursework, to include:

1. Twenty-one to twenty-four semester hours of work in writing, of which:
 - a. Twelve to fifteen semester hours will be taken in any combination of the following courses, provided at least two of the courses are taken: Fiction Workshop, Poetry Workshop, Drama Workshop, Article and Essay Workshop (the four workshops in writing may be repeated for credit), or Writing Seminar;

- b. Nine to twelve semester hours will be devoted to writing a creative thesis;
2. Twenty-one to twenty-four semester hours in literature and related courses, including ENG 5079, Issues in Literary and Cultural Studies.

Doctoral (PhD) Program in English

Admission to the program is determined by a departmental committee and normally requires: 1) a master's degree in English, or its equivalent, from an accredited college or university, with a GPA of at least 3.5; 2) Graduate Record Examination (GRE) scores; verbal scores in the 86th percentile range are typical among successful candidates; 3) three or more letters of recommendation assessing the applicants potential to do doctoral work in English; and 4) a writing sample. **These are minimum criteria, and meeting them does not guarantee admission.**

In order to obtain the doctoral degree, students must successfully complete at least twenty-seven semester hours, excluding dissertation credit, beyond the MA degree with an overall GPA of 3.5 or better; pass the preliminary examination formally admitting them to candidacy for the doctorate; submit and obtain approval for a prospectus; and write and successfully defend a doctoral dissertation (at least twenty-four semester hours). Although all PhD students must take a minimum of twenty-seven hours of coursework beyond the MA, any or all of the specific course requirements listed below may be waived, based on an evaluation of MA coursework. The following are the specific course requirements for the English doctoral degree:

1. Satisfy the MA distribution and language requirements listed above.
2. Eighteen (total) hours in an area of concentration (nine hours for those delivering a creative dissertation) chosen from the approved list of eligible concentrations or another area approved by the Vice Chair for Graduate Studies and the Graduate Committee, in preparation for the PhD preliminary exam in the major field. Students can bring forward a maximum of nine hours from the master's level towards the eighteen-hour PhD concentration requirement. Individual caucuses comprised of faculty specializing in the area will detail subdivisions to Areas of Concentration. Individual Areas of Concentration may involve additional requirements in that area. Faculty in the Area of Concentration will set these requirements. Students must fulfill the requirements of the Area of Concentration before they can sit for a preliminary major exam drawn from that area.
3. Some additional coursework in a minor area of concentration also chosen from the approved list of concentrations. The student will take the third day of their preliminary exams in this minor area.
4. Twenty-four hours of dissertation credit (ENG 6980r). PhD candidates who are not teaching assistants or do not have college teaching experience must take either LAE 5370 or ENC 5700. All PhD students must fulfill the university residency requirement. Details on this requirement can be found in the graduate edition of the *Bulletin*, under "Residency Requirement".

Each student must form a supervisory committee consisting of a major professor, at least two other members of the Department of English, and a tenured University representative from a department other than English. All committee members must have Graduate Faculty Status (GFS). In order to be admitted to formal candidacy for the doctorate, the student must pass a preliminary examination at least six months prior to the granting of the degree. The preliminary examination consists of: 1) a twelve-hour written examination (eight hours on the major area of concentration, four hours on the minor area of concentration) normally given over three days; and 2) a one- to two-hour oral examination administered by the student's supervisory committee, normally one to three weeks following the written examination.

Acceptable areas of concentration for the preliminary examination are: 1) Medieval and Early Modern British Literary and Cultural Studies (through 1660); 2) British and Irish Literary and Cultural Studies: 1660–1900; 3) Post 1900 Literary and Cultural Studies (American, British, Irish); 4) American Literary and Cultural Studies to 1900; 5) African-American Literary and Cultural Studies; 6) Feminism, Gender, and Sexuality Studies; 7) History of Text Technologies; 8) Colonial, Postcolonial, and Transnational Literary and Cultural Studies; 9) A Literary Genre; 10) Rhetoric and Composition. The minor field and so exam may be a distinct subset of the major area or it may be derived from another area of concentration. Major and minor areas will be chosen in consultation with the major professor; subject matter of the exam will be determined in consultation with the entire committee.

After passing the preliminary examination, the candidate is required to submit to the supervisory committee a prospectus for the dissertation. A copy of the prospectus, signed by the committee members, should be placed in the student's file in the Department of English at least one semester before the dissertation defense. Once the prospectus is approved, the candidate writes

the dissertation, working in close consultation with the major professor. The dissertation may be either: 1) an extended essay; 2) three or more essays, normally related by subject; or 3) an extended original work in fiction, poetry, or drama. The defense of the dissertation is held on the basis of a complete draft rather than the final copy of the dissertation at least one month prior to the date on which the degree is to be conferred. *A grade of PASS for the defense of the dissertation requires the unanimous approval of the examining committee.* Dissertation defenses will normally not be scheduled during the summer term or during final examination week.

Certificate in Publishing and Editing

The Department of English offers a certificate program in publishing and editing for graduate students interested in developing credentials and career experience in these fields. To qualify for the certificate, students must complete twelve credits, as described below:

Required core course (three hours): ENG 5801, Introduction to the History of Text Technologies

Three to six semester hours in additional academic courses, such as:

ENC 5216 Introduction to Editing and Publishing (3)

ENG 5933r Topics in English (Topics in/Theories of Publishing) (1–3)

ENG 6939r Seminar in English (Seminar in Publishing) (3)

HUM 6939r Seminar Topics (Seminar in Publishing) (3)

Three to nine semester hours in practicum courses:

ENC 5217r Topics in Editing (3–6)

ENC 5945r Internship in Editing (1–6)

ENG 5801 (3) may count toward both the Certificate and the curricular requirements of a graduate degree program. Nine credit hours of Certificate credit must be taken above and beyond the curricular requirements of a graduate degree and may not count doubly toward the Certificate and a graduate degree.

For further details, contact the Vice Chair for Graduate Studies in English or see the English department Web site: <https://english.fsu.edu/programs/graduate-certificate-publishing-and-editing>.

Definition of Prefixes

AML—American Literature

CRW—Creative Writing

ENC—English Composition

ENG—English: General

ENL—English Literature

LAE—Language Arts and English Education

LIT—Literature

Graduate Courses

AML 5017r. Studies in U.S. Literature to 1875 (3). This course takes various approaches to the study of U.S. literature from the colonial period to 1875. May be repeated within the same term to a maximum of twelve semester hours as topics vary.

AML 5027r. Studies in U.S. Literature Since 1875 (3). This course takes various approaches to the study of U.S. literature from 1875 to the present. May be repeated within the same term to a maximum of twelve semester hours as topics vary.

AML 5267r. Studies in Literature of the American South (3). This course takes various approaches to the study of American southern literature from the colonial period to the present. May be repeated within the same term to a maximum of twelve semester hours as topics vary.

AML 5296r. Studies in Multi-Ethnic Literature (3). This course offers an intensive study of a particular ethnicity, period, or topic in ethnic literature of the U.S. May be repeated within the same term to a maximum of twelve semester hours as topics vary.

AML 5608r. Studies in the African-American Literary Tradition (3). This course offer a study of the literary works of African-American writers. May be repeated within the same term to a maximum of twelve semester hours as topics vary.

AML 5637r. Studies in Latino/a Literature in English (3). This course covers various approaches to the study of Latino/a literature, including the work of Mexican-Americans (Chicano/a), Puerto Rican-Americans, and Cuban-Americans. May be repeated within the same term to a maximum of twelve semester hours as topics vary.

CRW 5130r. Fiction Workshop (3). Prerequisite: Instructor permission. This workshop approaches the development of the craft of fiction writing. Students are expected to work toward publication. May be repeated with instructor permission to a maximum twenty-seven semester hours.

CRW 5331r. Poetry Workshop (3). Prerequisite: Instructor permission. This course allows students to write and revise poetry. Students are expected to work toward publication. May be repeated with instructor permission to a maximum of twenty-seven semester hours.

CRW 5430r. Drama Workshop (3). Prerequisite: Instructor permission. In this course, students will work on writing and revising plays of varying length. Students are expected to work toward publication. May be repeated with instructor permission to a maximum of twenty-seven semester hours.

ENC 5216. Introduction to Editing and Publishing (3). This course serves as an introduction to book and magazine editing and publishing.

ENC 5217r. Topics in Editing (3–6). (S/U grade only). This course offers instruction in the practical aspects of editing such as line editing, copy editing, and design. May be repeated within the same term to a maximum of twelve semester hours.

ENC 5317r. Article and Essay Workshop (3). This course is for students working toward publication of expository writing. Course is structured with writer-editor relationship between student and instructor. May be repeated with instructor permission to a maximum of twenty-seven semester hours.

ENC 5700. Theories of Composition (3). This course is a detailed investigation of topics in the teaching of college composition. The course examines major theories about various aspects of composition, including the composing process, invention, style, writing assessment, and historical studies.

ENC 5720. Research Methods in Rhetoric and Composition (3). This course is an introduction to research design and practice, the evaluation of research studies, and bibliographic resources for conducting research in rhetoric and composition.

ENC 5945r. Internship in Editing (1–6). (S/U grade only). This course offers practical experience in editing and professional writing. May be repeated to a maximum of six semester hours.

ENG 5009. Introduction to Advanced Studies in English (3). This course introduces basic concepts and methods of advanced literary study.

ENG 5028. Rhetorical Theory and Practice (3). This course is a close study of classical and contemporary theory and its applicability to writing and teaching.

ENG 5049r. Studies in Critical Theory (3). This course covers various approaches to the study of literary criticism and theory. May be repeated to a maximum of twelve semester hours as topics vary.

ENG 5053. Studies in Textual Reception (3). This course provides an introduction to topics in the history and theory of the reception of texts. Within the “sociology of text”, reception is perhaps the end point to the cycle that begins with the production of texts. This course introduces students to topics in the study of the reception of texts, such as reading as a material practice, the phenomenology of reading, the study of specific geographic or historic reading communities, as well as case studies in the reception histories of particular authors, texts, and genres.

ENG 5068r. Studies in Language and Linguistics (3). This course focuses on various approaches to language study covering such topics as the evolution of the English language and questions of language acquisition, dialects, and grammar. May be repeated a maximum of twelve semester hours.

ENG 5079. Issues in Literary and Cultural Studies (3). This course provides an overview of the fundamental questions, topics, and problems that organize contemporary practice in literary and cultural studies.

ENG 5138r. Studies in Film (3). This course discusses various approaches to the study of film, including but not limited to filmic genres, and other issues in film theory and criticism. May be repeated to a maximum of twelve semester hours.

ENG 5801. Introduction to the History of Text Technologies (3). This course provides an overview of the complex interactions between literary culture and the changing, overlapping, frustrating, and inspiring media technologies that have shaped the way we produce, transmit, transform, receive, and interpret creative representations of human experience. Beginning with the two opposed categories of the ephemeral and the monumental, it describes and analyzes the historical evolution of technologies from manuscript to digital multimedia, using a combination of case studies, hands-on experience, and sampling from the most influential theoretical formulations of the field.

ENG 5805. Studies in Textual Production (3). This course introduces students to the materials and mechanics of text in its history or production. Particular topics vary, but each course taught under this number takes the phenomenon of textual production as its core, which might be inscription on stone, or chirographic text, or the evolution of print, or visual and verbal text, or the development digital media. Students learn to describe and analyze the key historical causes, effects, and attributes of particular materials and forms of textual production, the reasons behind the development of the particular physical attributes of any medium; and students acquire an ability to use the critical vocabulary of the broader field.

ENG 5807. Studies in Textual Transformation (3). This course introduces theories and case studies in the history of textual transformations. Course topics vary, but each course taught under this number takes as its central focus the phenomena of major textual transformations. Examples may include the transformation of texts from script to print or from foliated to digital forms; or textual issues related to translation; cultural and historical changes that both permit and follow from major textual shifts; the reception problems involved in the textual transformations of particular authors’ works or particular genres of literature. The course attends to specific technical mechanisms of textual transformation and to their broadest literary-cultural effects.

ENG 5835r. Topics in Publishing (3–6). This course offers instruction in the specific phases of the history and methods of publishing in academic journals. May be repeated to a maximum of six semester hours.

ENG 5906r. Directed Individual Study (1–3). (S/U grade only). Topic to be approved by the Director of Graduate Studies. May be repeated to a maximum of twenty-four semester hours.

ENG 5933r. Topics in English (1–3). Topics vary. May be repeated to a maximum of twenty-four semester hours.

ENG 5935r. Speakers in English Studies (1–3). (S/U grade only). This course is required of all graduate students in English throughout their residence. May be repeated to a maximum of twenty-four semester hours.

ENG 5971r. Thesis (1–6). (S/U grade only). Six semester hours of credit required.

ENG 5998r. Tutorial in English (1–3). (S/U grade only). Prerequisite: Instructor permission. This course entails intensive work by one to four graduate students devoted to a specific topic or research problem in English studies. May be repeated when topics vary, to a maximum of six semester hours.

ENG 6907r. Directed Readings (1–12). (S/U grade only). May be repeated to a maximum of twelve semester hours.

ENG 6939r. Seminar in English (3). Topics vary. May be repeated to a maximum of twenty-four semester hours.

ENG 6980r. Dissertation (1–12). (S/U grade only).

ENG 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

ENG 8966r. Master’s Comprehensive Examination (0). (P/F grade only.)

ENG 8976r. Master’s Thesis Defense (0). (P/F grade only.)

ENG 8985r. Dissertation Defense (0). (P/F grade only.)

ENL 5206r. Studies in Old English Language and Literature (3). This course explores various approaches to the study of Old English literature. May emphasize developing a reading knowledge of Old English with an understanding of its phonology, morphology and syntax. May focus upon literary texts. Literature course requires a working knowledge of Old English language. May be repeated to a maximum of twelve semester hours as topics vary.

ENL 5216r. Studies in Middle English Language and Literature (3). This course explores various approaches to the study of the languages and literary texts from the twelfth to the fourteenth century. May be repeated to a maximum of twelve semester hours as topics vary.

ENL 5227r. Studies in Renaissance Literature (3). This course covers various approaches to the study of British works and authors from 1500 to 1660, including but not limited to poetry, prose, and drama. May be repeated to a maximum of twelve semester hours as topics vary.

ENL 5236r. Studies in Restoration and 18th-Century British Literature (3). This course explores various approaches to the study of British works and authors from 1660 to 1800, including but not limited to poetry, prose, and drama. May be repeated to a maximum of twelve semester hours as topics vary.

ENL 5246r. Studies in British Romantic Literature (3). This course explores various approaches to the study of British romantic poetry and prose from 1785 to 1832. May be repeated to a maximum of twelve semester hours as topics vary.

ENL 5256r. Studies in Victorian Literature (3). This course explores various approaches to the study of Victorian literature from 1830 to 1900. May be repeated to a maximum of twelve semester hours as topics vary.

ENL 5276r. Studies in 20th-Century British Literature (3). This course explores various approaches to the study of British literature since 1900. May be repeated to a maximum of twelve semester hours as topics may vary.

LAE 5370. Teaching English in College (3).

LAE 5946. Teaching English as a Guided Study (3).

LAE 5948r. Supervised Teaching (0–5). (S/U grade only). May be repeated to a maximum of five semester hours.

LIT 5017r. Studies in Fiction (3). This course covers various approaches to the study of prose fiction, including but not limited to American, British, and European authors. May be repeated to a maximum of twelve semester hours as topics vary.

LIT 5038r. Studies in Poetry (3). This course covers various approaches to the study of poetry and poets. May be repeated to a maximum of twelve semester hours as topics vary.

LIT 5047r. Studies in Drama (3). This course utilizes various approaches to the study of drama and dramatists. May be repeated to a maximum of twelve semester hours as topics vary.

LIT 5186r. Studies in Irish and/or Scottish Literature (3). This course covers various approaches to the study of Irish and/or Scottish literature and culture. May be repeated to a maximum of twelve semester hours as topics vary.

LIT 5235r. Studies in Post-Colonial Literature in English (3). This course covers various approaches to the study of English-language literature from “Third World” countries that were former British colonies in Africa, Asia, and the Caribbean. May be repeated to a maximum of twelve semester hours as topics vary.

LIT 5309r. Studies in Popular Culture (3). This course covers various approaches to the study of popular culture, its intellectual history and forms, and its influence on literature. May be repeated to a maximum of twelve semester hours as topics vary.

LIT 5327r. Studies in Folklore (3). This course covers various approaches to the study of traditional lore, including myth, legend, tale, song, ballad, beliefs, and customs. May be repeated to a maximum of twelve semester hours as topics vary.

LIT 5388r. Studies in Women’s Writing (3). This course covers various approaches to the study of women’s writing and women writers. May be repeated to a maximum of twelve semester hours as topics vary.

LIT 5517r. **Studies in Gender in Literature (3).** This course covers various approaches to the study of masculinity, femininity, and sexual identity in literary and cultural texts. May be repeated to a maximum of twelve semester hours as topics vary.

ENGLISH COMPOSITION:
see English

ENGLISH EDUCATION:
see Teacher Education

ENGLISH LITERATURE:
see English

ENGLISH FOR NON-NATIVE SPEAKERS:
see Teacher Education

ENVIRONMENTAL ENGINEERING:
see Civil and Environmental Engineering

**ENVIRONMENTAL PLANNING AND NATURAL RESOURCE
MANAGEMENT:**
see Urban and Regional Planning

EUROPEAN HISTORY:
see Classics; History

EVOLUTIONARY BIOLOGY:
see Biological Science

EXERCISE PHYSIOLOGY:
see Nutrition, Food, and Exercise Sciences

EXPERIMENTAL ANALYSIS OF BEHAVIOR:
see Psychology

EXPERIMENTAL PSYCHOLOGY:
see Psychology

Jim Moran College of ENTREPRENEURSHIP Graduate Programs

Website: <https://jimmorancollege.fsu.edu/grad/>

Dean: Susan S. Fiorito; **Professors:** Fiorito, Kim, Schofield; **Associate Professor:** Clayton; **Assistant Professors:** Manchiraju, McQuerry; **Associate Lecturer:** Frazier, Garner, Langston, Parker, Steed; **Assistant Lecturer:** Baber, Breed, Garner, Griffin, Hackett, Hand, Lewis, McHaffie, McNees, Tatum, Whalen; **Instructional Specialists:** McLaughlin, Plant, Soto; **Jim Moran Professors:** Fiorito

The Jim Moran College of Entrepreneurship, through its faculty, curricula, and programs, is committed to educating and developing its students for careers as future business executives and leaders.

As a result of its capable and dedicated faculty, the Jim Moran College of Entrepreneurship has been able to attract highly qualified students. These students have strong analytical and communicative aptitudes and have a spirit of enterprise and creativity. The interaction of these students with highly qualified faculty, coupled with well-designed program options, creates a stimulating learning environment.

Mission

It is the mission of the Jim Moran College of Entrepreneurship to inspire innovation, instill compassion, and ignite an entrepreneurial mindset in the next generation of leaders.

Admission Requirements

Students apply to the Jim Moran College of Entrepreneurship graduate programs through Florida State University's Office of Admissions website at <https://admissions.fsu.edu/gradapp>. Completed applications including all supporting documents must be received by June 1 to be considered for financial aid for the Fall semester. All applications must be received by July 1 for admission to the Jim Moran College of Entrepreneurship. Applicants must meet the following minimum requirements:

1. 3.0 undergraduate GPA (4.0 scale) as an upper-level undergraduate.
2. Test scores from a nationally standardized graduate admission test (such as GRE or GMAT).
3. Two (2) letters of recommendation from individuals who are able to assess the applicant's academic potential. Preferably one (1) academic reference letter and one (1) professional letter.
4. Official transcripts (in a sealed envelope) from each college and/or university attended sent to the Office of Admissions. FSU transcripts or official transcripts already on file will be obtained by the Office of Admissions.

International applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) examination and obtain a minimum score of 550 on the paper-based or 80 on the Internet-based TOEFL examination. International students expecting to receive appointments as teaching assistants are required to pass a test of spoken English (SPEAK) administered by the FSU Center for Intensive English Studies (<http://cies.fsu.edu/>) when they arrive at Florida State University.

Master Of Science (MS) in Retail Entrepreneurship

The Jim Moran College of Entrepreneurship welcomes a new Master of Science degree in Retail Entrepreneurship with a major in Textiles and Apparel Entrepreneurship (MS-TAE). This program will enable students to gain the tools necessary to succeed in textile and apparel industries, while enhancing research and technical skills needed for new product design, development and management. This program will prepare graduates for careers in quality analysis and textile testing.

The curriculum will delve into topics involving the process of innovation, testing and analysis, introduction to entrepreneurship and supply chain, manufacturing, distribution, advancement, and consumption in the area of textile and apparel product development. The graduate degree will prepare tomorrow's textile and apparel industry leaders with entrepreneurial insights through the exploration of new technologies while gaining a better understanding of the advancements in the current industry.

Degree Requirements

The MS in Retail Entrepreneurship with a major in Textiles and Apparel Entrepreneurship (MS-TAE) degree requires thirty (30) credit hours of coursework: twenty-one (21) credit hours of core courses and nine (9) credit hours of electives. A list of the core and elective courses can be found at <https://jimmorancollege.fsu.edu>.

Core Curriculum

Students are required to take twenty-one (21) hours of the following coursework:

- COM 5312 Research Methods in Communication (3)
- CTE 5471 Quality Assurance Assessment (3)
- CTE 5815 Retail Technologies (3)
- CTE 5445 Advancements in Textile Technology (3)
- CTE 5471 Sustainability / Social Responsibility (3)
- ENT 5216 Foundations of Entrepreneurship and Leadership (3)
- ENT 5XXX Textile and Entrepreneurship Trends and Investigations (3)

Elective Curriculum

Students are required to take nine (9) hours of elective coursework. Elective options include, but are not limited to, the following:

- CTE 5XXX Textiles and Apparel Entrepreneurship in Florence (3)
- CTE 5XXX Design Thinking (3)
- COA 5400 Consumer Behavior (3)
- CTE 5XXX Product Design (3)
- CTE 5XXX Textiles for Interiors (3)
- ENT 5901 Directed Independent Study in Entrepreneurship (1–6)

Master of Science (MS) in Entrepreneurship

The Jim Moran College of Entrepreneurship welcomes a second new Master of Science degree in Entrepreneurship. This program will offer two new majors – Hospitality Entrepreneurship and Product Development. The Hospitality Entrepreneurship major will be offered completely online, while the product development major is offered as a full-time program on FSU's main Tallahassee campus. Both programs will offer one (1) credit hour optional study abroad seven (7) to nine (9) days opportunities – listed below within the curriculum.

The online Hospitality Entrepreneurship major in the MSE program will focus on entrepreneurial endeavors in hospitality – opening, building, or innovating new hospitality enterprises. The program will rely heavily on the acquisition and application of skills in real-world entrepreneurial hospitality enterprises. This degree will provide advanced online education to allow graduates to pursue careers in a variety of corporate, government and/or academic professions.

The Product Development Entrepreneurship major will prepare individuals who seek to work in any company, private or public, advancing their knowledge and skills in product design and development. The core curriculum of the proposed program will include topics in financial literacy and accounting, strategy and ethics in management. The classes offered in the product development major will allow us to provide students with hands-on experience in innovation and commercialization, further developing their abilities to implement their education from the MSE program in today's highly competitive and lucrative field of entrepreneurship.

Degree Requirements

The MS in Entrepreneurship (MSE) degree requires thirty (30) credit hours of coursework, with twelve (12) hours of shared core courses between both majors. A list of the degree program requirements can be found at <https://jimmoracollege.fsu.edu>.

Core Courses for Both Majors

- Financial Literacy/Accounting in Capital Markets
- Ethics in Management
- Strategic Formulation
- Entrepreneurship and Leadership

Major Courses for Product Development

- Product Development Colloquium
- Product Design
- Intellectual Properties
- Product Development Analytics
- Marketing
- HR Management for Entrepreneurs

Major Courses for Hospitality Entrepreneurship

- Hospitality Entrepreneurship Colloquium
- Entrepreneurial Lodging
- Law/Contracts
- Marketing and Social Media

International Experience

An international program (IP) experience is highly encouraged. These opportunities are available throughout the year and will be part of a course curriculum.

- IP Course in Florence, Entrepreneurial Lodging
- IP Course in Panama, Supply Chain
- IP Course in Valencia, Hospitality Management
- IP Course in Florence, Textiles and Apparel

Definition of Prefixes

COA—Consumer Affairs

COM—Communication

CTE—Clothing and Textiles

ENT—Entrepreneurship

Graduate Courses

COA 5400. Consumers in a Complex Marketplace (3). This course examines consumer behavior, which encompasses all activities related to purchase, use, and disposal of goods and services, including the consumer's emotional, mental, and behavioral responses that precede or follow these activities. This course covers diverse topics from various disciplines to understand the "enigmatic" consumer and the marketplace behavior they engage in.

COA 5471. Sustainability and Human Rights in the Business World (3). This course provides an overview of social responsibility, human rights, and sustainability, and it identifies strategies and frameworks to apply to socially-responsible and sustainable business. This course also explores the roles of the consumer, corporation, and government and nongovernmental organizations.

COA 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated up to a maximum of six semester hours.

CTE 5125. Design Thinking (3). This course introduces students to design thinking, problem seeking ideation techniques and strategies, creative intelligence, and the methodologies embedded in the design thinking process. The course empowers individuals to strategize, plan, and solve complex problems across a multitude of situations and venues.

CTE 5444. Quality Assurance Assessment (3). This course explores assessment of quality performance parameters for specific textile product end uses based on standard test methods, government regulations, and certification requirements.

CTE 5445. Textile Technologies (3). This course surveys and investigates novel textile technologies at the fiber, yarn, fabric, finish, manufacturing, and testing levels for specific industry end use and product performance applications.

CTE 5471. Sustainability and Human Rights in the Business World (3). This course provides an overview of social responsibility, human rights, and sustainability, and it identifies strategies and frameworks to apply to socially-responsible and sustainable business. This course also explores the roles of the consumer, corporation, and government and non-governmental organizations.

CTE 5807. Retail Merchandising Concepts (2–4). Prerequisite: MAC 1105, MGF 1106, or MGF 1107. This course is designed to give graduate students an accelerated view of basic concepts and principles in the merchandising field. Students who have taken CTE 3806 and CTE 4822 are not eligible to enroll in this course. Specifically, this course will (1) provide an overview of every aspect of the retailing industry including historical perspectives, analysis of the decades of the twentieth century, the various materials used by fashion innovators, the design process of apparel and accessories, the roles played by the ancillary arms of the industry, and the marketing of collections; and (2) examine the principles of effective quantitative merchandising management.

CTE 5815. Retail Technologies (3). This course pursues an in depth study of the principal retail technologies and systems currently being developed and used across the country. May be repeated once as course content changes, with permission from the instructor.

CTE 5816. Merchandising Organization (3). Prerequisites: CTE 4822 and MAR 3023, or their equivalents. This course formulates an understanding and synthesis of knowledge concerning retail outlets for fashion merchandising emphasizing organizational structure and operational methods.

CTE 5828. Merchandising Buying (3). Prerequisites: CTE 4822 and MAR 3023, or their equivalents. This course examines how merchandising management is defined by identifying the techniques and theories of retail buying with emphasis on the buyer's retail management role.

CTE 5834. Merchandising Theory and Research (3). Prerequisite: Merchandising or retailing coursework. This course focuses on the theories utilized in merchandising, including evaluating the use of these theories in current research.

CTE 5847. Retail Branding and Promotion (3). Prerequisites: CTE 5807 and CTE 5905, or equivalent courses. This course explores the role of brands in promotional advertising and in-store promotions in the retail industry. Students analyze all facets of the promotional mix and impact technology has on the consumer.

CTE 5884. Advanced Fashion Merchandising Practicum (6). (S/U grade only.) Prerequisites: CTE 4811, CTE 4822, CTE 4826 and graduate standing in the merchandising track; interviewing for placement required. This course focuses on professional development through practical experience in the apparel and retail merchandising field.

CTE 5906r. Directed Individual Study (1–3).

CTE 5911. Research Analysis in Clothing and Textiles (3). This course is an analysis and interpretation of research in textiles and consumer sciences. Principles of quantitative and qualitative research; methodologies used in survey, experimental, and historical research. Emphasis is placed on theory development, and research design.

CTE 5912r. Supervised Research (1–3). (S/U grade only.)

CTE 5930r. Clothing and Textiles Seminar (1). This course explores current research in textiles and consumer sciences.

CTE 5935r. Special Topics (1-6). This course dives into current issues and practices in retail and entrepreneurship, specifically within the textile and apparel industry. Topics vary. May be repeated to a maximum of nine (9) credit hours; repeatable within the same term.

CTE 5942r. Supervised Teaching (1–3). (S/U grade only.)

CTE 6436. Product Innovation and Management (3). This course explores the process of new products management in the global market with a focus on strategic elements of product development such as the new products process, the product innovation charter, and the new product portfolio.

CTE 6936r. Special Topics in Clothing/Textiles/Merchandising (1–6). Advanced study of selected topics in textiles, merchandising, or apparel product development with emphasis on problem analysis and resolution. May be repeated when topics vary.

CTE 6980r. Dissertation (1–24). (S/U grade only). Prerequisite: Admission to doctoral candidacy.

CTE 8964r. Preliminary Doctoral Examination (0). (P/F grade only).

CTE 8985r. Dissertation Defense (0). (P/F grade only).

ENT 5216. Foundations of Entrepreneurship and Leadership (3). In this course, students develop an understanding of the foundations of entrepreneurial behavior, by providing a broad survey of entrepreneurship and leadership topics. Students are exposed to different types of entrepreneurship, and the course covers an array of topics that span from idea generation through venture formation, financing, scaling, and leading the entrepreneurial venture.

ENT 5627. Healthcare Innovation and Medical Entrepreneurship (3). This course provides training in the leadership of innovation in patient care delivery. The course allows students to develop and deploy patient-centered solutions that create value by improving both quality and efficiency in their systems and communities.

ENT 5901r. Directed Independent Study in Entrepreneurship (1–6).

Graduate Certificate in EVENT MANAGEMENT

COLLEGE OF APPLIED STUDIES

Program Coordinator: Rosemary Prince

Please Note: as of November 1, 2016, admission to the program has been suspended with the intent to terminate the program. Applications are no longer being accepted. Students previously accepted to the program should contact the Certificate Program Coordinator at rprince@fsu.edu.

Definition of Prefix

LEI—Leisure

Graduate Courses

LEI 5185. Current Issues in Leisure (1). This course addresses the current issues facing the profession and the practitioner of leisure services.

LEI 5316. Event Planning Management (3). This course focuses on managerial aspects of event operations such as economic impact, assessment, infrastructure, safe operations, staging and production, food and beverage operations, vendors, and volunteers.

LEI 5317. Event Management Issues in Ethics and Risk Management (3). This course focuses on issues and considerations in event planning ethics, risk management, and safety.

LEI 5530. Problems of Staff Development (3). This course is an in-depth analysis of the issues and problems related to working with staff members. Designed to enhance the skills and knowledge necessary to successfully motivate, train, appraise performance, and compensate staff members.

LEI 5555. Analysis and Management of Leisure Systems (3). This course is an analysis and evaluation of leisure systems, operations, programs, personnel, and fiscal resources from a quantitative and qualitative perspective.

LEI 5563. Event Marketing (3). This course focuses on the components required for development of marketing plans for the various venues in the special events industry, including sponsorship acquisition.

LEI 5576. Fiscal Policy and Management of Leisure Systems (3). This course is an analysis of financial management policies and practices of leisure delivery systems.

LEI 5815. Leisure Education (3). This course helps develop the knowledge and skill to enable student to conceptualize and design programs, services, and strategies to educate public on leisure.

LEI 5889. Research in Leisure Services (3). This course is a critique of research, the sources and the skills of constructing research designs.

LEI 5908r. Directed Individual Study (1–3). May be repeated to a maximum of twelve semester hours.

LEI 5915r. Supervised Research (1–4). (S/U grade only).. A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of four semester hours

LEI 5930r. Special Topics in Recreation and Leisure (1–3). In this course, topics of current or special interest in recreation and leisure services are studied in depth. May be repeated for a maximum of twelve semester hours.

LEI 5941. Practicum in Leisure Services (9). This practicum gives students full-time experience in a leisure agency under the supervision of a professional practitioner.

LEI 5942. Practicum in Events Management (3). LEI 5316(C or higher), LEI 5317(C or higher), and LEI 5563(C or higher); must be accepted to Events Management Certificate Program; and must have 3.0 overall GPA for certificate courses. Students must earn a B or higher to pass the course. This course provides students with an opportunity to apply knowledge, skills, and attitudes developed during their academic preparation. The course aims to help students gain valuable experience in management of events. Students complete a minimum of 150 hours over an extended period of time, but not less than twelve weeks.

LEI 5944r. Fieldwork in Leisure Services (1–3). This course is designed to provide the student an opportunity to gain practical experience by working in a leisure setting. May be repeated to a maximum of six semester hours.

LEI 5945r. Supervised Teaching (1–5). (S/U grade only).. A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

LEI 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

LEI 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

Graduate Department of FAMILY AND CHILD SCIENCES

COLLEGE OF HUMAN SCIENCES

Web Page: <http://humansciences.fsu.edu/departments/family-child-sciences>
Interim Chair: Ray; **Assistant Department Chair:** Greene; **Eminent Scholar and Professor:** Fincham; **Norejane Hendrickson Professor:** Grzywacz; **Marriage & Family Therapy Program Director:** McWey; **Graduate Program Director:** Gonzales-Backen; **Professors:** Cui, Krantz, McWey, Ralston; **Associate Professors:** Gazelle, Rehm; **Assistant Professors:** Blair, Gonzales-Backen, Kimmes, Ledermann, Parker, Wu; **Teaching Faculty:** Diop, Greene, Harris, Holcomb, Jeter, Scott, Wilson; **Research Specialists:** Denis-Luque, Marin, May, Trejo; **Clinical Faculty:** Greene, McWey, Kimmes, Parker, Wu; **Cross Appointments:** Goldfarb (FSU College of Medicine), Mason (Boys Town), Turner (FSU College of Medicine); **Professors Emeriti:** Cornille, Darling, Greenwood, Hansen-Gandy, Hicks, Lee, A. Mullis, R. Mullis, Pasley, Pestle, Rapp, Readdick, Zongker

The Department of Family and Child Sciences is among the top five programs in the country in terms of number of faculty publications and successful competition for federal grants. Research findings are the foundation of an innovative curriculum that focuses on understanding the complexities of daily family life and how children and adults develop across the life span. Graduate training emphasizes translating results from rigorous research into real-world solutions that help children, adults, and families. We believe student learning is most effective when it occurs through active engagement in research and teaching.

The department offers a Master of Science degree in Family and Child Sciences. Thesis and non-thesis options are available; the thesis option typically leads to subsequent pursuit of a doctoral degree, while the non-thesis option is typically selected by professionals who will assume leadership roles in community agencies or governmental departments or units serving children and families.

The department offers two Doctor of Philosophy (PhD) programs: 1) Human Sciences with a major in Human Development and Family Science, and 2) Marriage and Family Therapy. These doctoral programs are designed to produce the next generation of scholars who compete successfully for faculty positions in human development and family science, marriage and family therapy, and related fields at research-intensive institutions. Both doctoral programs may be combined with a secondary area of study. In keeping with college policy, there is no language requirement for doctoral students.

Admission Requirements

Applying to the graduate programs in Family and Child Sciences requires submission of 1) official copies of transcripts with degrees posted from all colleges/universities previously attended; 2) official Graduate Record Examinations (GRE) scores (verbal, quantitative, and writing); 3) three letters of recommendation; and 4) a statement of professional goals (for the master's program) or professional goals and research interests (for the doctoral program). Competitive applicants must have Graduate Record Examination (GRE) scores better than or equal to 50th percentile, and a 3.5 GPA on a 4.0 scale for the last two years of academic work. Only applicants for whom a designated member of the departmental graduate faculty expresses willingness to mentor will be admitted to the program. In some instances, supplemental coursework (undergraduate and graduate) may be required for students entering the program from other fields of study or without proper requisite knowledge. Options available to the student are discussed prior to admission to the program. Students entering the doctoral program in Marriage and Family Therapy must have completed a master's degree in MFT from a COAMFTE accredited program or a closely related degree. Master's and Doctoral students are admitted for Fall only.

Financial Assistance

The Department of Family and Child Sciences makes every effort to provide financial assistance, including stipends and tuition waivers, for graduate students in good standing. Students who request financial assistance typically receive some kind of support throughout their graduate education. Sources of funding include the following: fellowships, teaching assistantships, research assistantships, departmental assistantships, minority program fellowships, and scholarships. Priority for departmental financial assistance is given to doctoral students.

Master of Science (MS) in Family and Child Sciences

A minimum of thirty semester hours is required for the thesis option including six semester hours of thesis credit. Students may elect to take the non-thesis option and complete thirty semester hours including a three-credit special project.

Required Core Courses (ten semester hours):

CHD 5617 Professional Development in FCS (1)

CHD 5266 Advanced Child Development (3)

OR

FAD 5263 Advanced Family Studies (3)

CHD 6261 Theories of Child Development (3)

OR

FAD 6436 Theories of Family Science

Required Research Courses (eleven to fourteen semester hours):

CHD 5915 Methods of Research I (4)

FAD 5700 Applied Research in Human Sciences (4)

FAD 5970 Special Project (3) (non-thesis option)

OR

CHD/FAD 5971 Thesis (6)

Required Electives (six to twelve semester hours):

A minimum of six (thesis option) to twelve (non-thesis option) semester hours are to be selected from family and child sciences at the 5000 level. Courses at the 6000 level may be selected with the approval of the instructor and major professor.

The balance of the coursework in the major is selected by the student in consultation with the student's major professor and supervisory committee.

Doctor of Philosophy (PhD) Programs

The Department of Family and Child Sciences' doctoral programs offer a unique curriculum that integrates human development and family science with marriage and family therapy. This purposeful integration is designed to enhance communication and cross-fertilization of ideas between basic human development and family science with the clinical practice. All students in both programs must pass a preliminary examination prior to admission to doctoral candidacy and before they can register for dissertation hours. A minimum of thirty semester hours of graduate courses must be selected from within the department, and students must take at least fifteen semester hours in research methods or statistics courses.

PhD Degree in Human Sciences with a Major in Human Development and Family Science with In-Flight Master's

The MS portion of the degree program requires a minimum of 30 semester hours in coursework including three semester hours in a special research project. The PhD portion of the degree program requires a minimum of 36 semester hours in coursework plus 24 semester hours in dissertation beyond the master's degree. Courses that were not included on the MS program of study but that were taken prior to a student being awarded the MS, may be included on the PhD program of study and counted toward the doctoral degree. Cumulatively across the MS and PhD portions of the program, students will accrue 48 (30 in MS portion, 18 in PhD portion) semester hours of graduate courses within the Department. A maximum of 6 semester hours graded with S/U are allowed. Below is a listing of the required coursework with the balance of the planned program based on the student's background and professional goals.

MS In-flight Curriculum

Required Core Courses:

CHD 5266 Advanced Child Development (3)

OR

FAD 5263 Advanced Family Studies (3)

CHD 5617 Professional Development in Family and Child Sciences (1)

CHD 6261 Theories of Child Development (3)

Required Research and Statistics:

CHD 5915 Methods of Research I (4)

FAD 5700 Applied Research in Human Sciences (4)

FAD 5970 Special Project (3)

Electives (twelve semester hours)

Ph.D. In-flight Curriculum

Required Core Courses:

HOE 6366 Research Best Practices in Human Sciences (2)

FAD 5481 College Teaching in Family Sciences (2–3)

FAD 5942 Supervised Teaching (1–3)

FAD 6436 Theories of Family Science (3)

FAD 6930r Special Topics: Family Diversity (3)

Required Research and Statistics:

FAD 6935r Special Topic: Qualitative Methods (4)

FAD 5912r Supervised Research (1–3)

FAD 6917 Research Methods in Family and Child Sciences (3)

FAD 8964r Preliminary Doctoral Exam (0)

FAD 6980 Dissertation (24)

FAD 8985r Dissertation Defense Examination (0)

Required Data Analytic Electives (fifteen semester hours)

Other Electives (three semester hours)

PhD Degree in Human Sciences with a Major in Human Development and Family Science

A minimum of fifty-six semester hours of graduate coursework, exclusive of the dissertation, is required beyond the master's degree for the doctoral degree in human sciences with an emphasis in human development and family science. More hours are normally taken, because programs of study are individually tailored to meet students' professional goals. In addition to a broad range of subject matter courses, students acquire a solid foundation in research methodology and statistics. The PhD program is an individual program planned by students, their major professor, and supervisory committee. Below is a listing of the required coursework with the balance of the planned program based on the student's background and professional goals. At least fifty-six semester hours of graduate work in addition to the dissertation is required beyond the master's degree.

Required Core Courses (fifteen to eighteen semester hours):

FAD 5481 College Teaching in Family Sciences (2–3)

FAD 5942 Supervised Teaching (1–3)

CHD 6261 Theories of Child Development (3)

FAD 6436 Theories of Family Science (3)

CHD 5617 Professional Development in Family and Child Sciences (1)

HOE 6366 Research Best Practices in Human Sciences (2)

FAD 6930r Special Topic: Family Diversity (3)

Required Research and Statistics Courses (thirty-nine to forty-one semester hours):

CHD 5912r Supervised Research (1–3)

CHD 5915 Methods of Research I (4)

FAD 5700 Applied Research in Human Sciences (4)

FAD 6917 Research Methods in Family and Child Sciences (3)

FAD 6935r Special Topics: Qualitative Methods in Family and Child Development (3)

FAD 6980r Dissertation (24)

FAD 8964 Preliminary Doctoral Exam (0)

FAD 8985r Dissertation Defense Examination (0)

Required Data Analytic Electives (twelve semester hours)

Other Electives (Fourteen semester hours)

Students lacking adequate background in FCS may be required to enroll in a series of leveling courses, the least of which include FAD 5263 (Advanced Family Studies).

PhD in Marriage and Family Therapy

The doctoral program in marriage and family therapy, which is one of the oldest doctoral programs accredited by the Commission on Accreditation

for Marriage and Family Therapy Education (COAMFTE) of the American Association for Marriage and Family Therapy (AAMFT), requires sixty-one hours of graduate coursework exclusive of the dissertation. Required courses include substantive content, research methods, and clinical practice and supervision, including an internship.

Required Courses (fifteen to eighteen semester hours):

FAD 5481 College Teaching in Family Sciences (2–3)

CHD 5617 Professional Development in Family Child Sciences (1)

FAD 5942 Supervised Teaching (1–3)

FAD 6605 Advanced Clinical/MFT Theory (3)

FAD 6916 Outcome Research in Marriage and Family Therapy (3)

FAD 6930r Special Topics: Marital and Family Therapy—Family Diversity (3)

HOE 6366 Research Best Practices in Human Sciences (2)

Required Research and Statistics Courses (forty-one semester hours):

CHD 5915 Methods of Research I (4)

FAD 5700 Applied Research in Human Sciences (4)

FAD 6917 Research Methods in Family and Child Sciences (3)

FAD 6930 Special Topics in MFT—Intervention Research (3)

FAD 6935r Special Topics: Family and Child Development—Qualitative Methods in FCS (3)

FAD 6980r Dissertation (1–24)

FAD 8964 Preliminary Doctoral Exam (0)

FAD 8985r Dissertation Defense Examination (0)

Clinical Practice Requirements (twenty-one semester hours):

FAD 6606 Supervision in Marriage and Family Therapy (3)

FAD 6940r Practicum in Marriage and Family Therapy (1–5)

FAD 8944r Internship in Marriage and Family Therapy (1–12)

Data Analytic Electives (three semester hours)

Definition of Prefixes

CHD—Child Development

FAD—Family Development

HOE—Home Economics: General

Graduate Courses

Child Development

CHD 5266. **Advanced Child Development (3).** Survey of the contemporary child development research literature.

CHD 5617. **Professional Development in Family and Child Sciences (1).** Prerequisite: Graduate standing. This course is designed to introduce graduate students in Family and Child Sciences to professional development topics in the field of family and child sciences.

CHD 5618. **Policy Development and Analysis in Child and Family Sciences (3).** Prerequisites: Graduate standing, background in child and family studies, as well as instructor permission. This course surveys local and national public policy issues affecting individuals and families.

CHD 5906r. **Directed Individual Study (1–3).** (S/U grade only). May be repeated to a maximum of nine semester hours.

CHD 5915. **Methods of Research I (4).** Prerequisite: A graduate statistics course such as EDF 5401 or equivalent. This course explores research design, with emphasis on the development of a thesis or dissertation prospectus. Includes a laboratory to practice data-analysis applications.

CHD 5919. **Grant Writing in Family and Child Sciences (3).** Prerequisites: Graduate standing, background in family and child development, as well as instructor permission. This course is designed to identify funding sources at local, state, and federal levels. Students review techniques and develop proposals to be submitted to child and family funding sources.

CHD 5940r. **Practicum in Child Development: Varied Ages [infancy, preschool, school-age] (3–9).** Prerequisites: Background knowledge in child development or early childhood education and instructor permission. May be repeated within the same term but only once in each age level to a maximum of nine semester hours.

CHD 6261. **Theories of Child Development (3).** Prerequisites: Graduate courses in child development, psychology, counseling, or family studies, as well as instructor permission. Review of current theories of child development.

CHD 6264. Assessment Techniques for Children and Families (3). Prerequisites: Background in child and family studies, as well as instructor permission. This course examines current child and family assessment techniques. Psychometric characteristics of measurements are reviewed.

CHD 6930r. Seminar in Child Development: Topics Vary and/or Ages Vary [prenatal, infancy, preschool, school-age through adolescence] (3–9). Prerequisites: Graduate courses in child development, psychology, counseling, or family, as well as instructor permission. Each age or topic may be taken only once. May be repeated to a maximum of nine semester hours.

Family Development

FAD 5256. Parent and Child Relations (3). Prerequisites: Background in child and family studies or instructor permission. This course examines current research in parent-child relationships across the life span.

FAD 5261. Families in Crisis (3). Prerequisite: Background in family or instructor permission. Theoretical consideration of persistence and change in families with special attentions to critical transitions in family development.

FAD 5263. Advanced Family Studies (3). Prerequisites: Graduate standing, background in child and family studies or instructor permission. This course surveys contemporary research in family studies.

FAD 5452. Human Sexuality Education (3). Prerequisite: Instructor permission. This course examines sexuality through the life span regarding relationship issues and health concerns and also provides sexual-education training for professionals and parents.

FAD 5481r. College Teaching in Family Sciences (2–3). (S/U grade only). This course prepares students to teach in the area of family sciences in a higher education setting. It focuses upon units of study, evaluation, procedures, teaching models and strategies. May be repeated to a maximum of three semester hours.

FAD 5618. Legal, Ethical, and Professional Issues in Marriage and Family Therapy (3). This course builds the foundation for ethical and legal concerns relevant to the practice of Marriage and Family Therapy. The course assists students in developing personal and professional guidelines for the ethical practice of MFT within the context of existing professional practice standards and governing laws. Students confront and analyze dilemmas and issues pertinent to the responsible practice of therapy.

FAD 5619. Professional Issues in Family and Child Sciences (3). Prerequisite: Graduate standing. This course introduces students to two major concepts: professional identity and ethical issues in family and child studies.

FAD 5700. Applied Research in Human Sciences (4). This course provides an introduction to the use of statistical inference and data analysis for students majoring in human sciences, using unique examples and datasets that are discipline specific. Laboratory experiences emphasize the use of various analytic techniques.

FAD 5705. Qualitative Research in Family and Child Sciences (3). Prerequisite: CHD 5915. This course prepares students to critically engage with qualitative research, conduct qualitative studies, and incorporate qualitative components in research involving mixed methods regarding family systems, children, and other relational systems. This course focuses on narrative research, with additional investigation of ethnographic and case study research.

FAD 5900r. Readings in Family and Child Sciences (3). In this course, topics vary and each topic may be taken only once.

FAD 5906r. Directed Individual Study (1–3). (S/U grade only). May be repeated to a maximum of nine semester hours.

FAD 5934r. Seminar in Family and Child Sciences (1–9). Prerequisites: Background in child and family studies at the graduate level or instructor permission. Topics vary and each topic may be taken only once. May be repeated to a maximum of nine semester hours.

FAD 5944r. Internship–Family/Child (1–12). Prerequisite: Family relations/child development majors only; Corequisite: Graduate standing. Supervised practical field experiences in various professional settings related to family/child development including human services, agencies, hospitals, educational facilities, and government. May be repeated to a maximum of twelve semester hours.

FAD 5970. Special Project (3). (S/U grade only). Prerequisite: Master's degree student. Open to course option master's degree students who are near completion of their course requirements. Permission of major professor required.

FAD 6436. Theories of Family Sciences (3). Prerequisites: Graduate standing, background in child and family studies, as well as instructor permission. This course is a review of current theories in family studies.

FAD 6450. Human Sexuality (3). Prerequisite: Advanced graduate standing or instructor permission. Biological, psychological, sociological, and familial aspects of human sexuality during the life span. Emphasis on examining socio-cultural values and norms regarding human sexuality, understanding sexual health and its treatment, and providing sex education and support through helping professions.

FAD 6605. Advanced Clinical Marriage and Family Therapy Theory (3). Prerequisite: Admission to the Marriage and Family Therapy Program; or Introductory knowledge of systemic family therapy approaches and instructor permission. This course is an in-depth, advanced study of traditional and contemporary theories within the field of marriage and family therapy (MFT).

FAD 6606. Supervision in Marriage and Family Therapy (3). Prerequisite: Passage of Clinical Comprehensive Examination in Marriage and Family Therapy. This course teaches the fundamentals of marital and family therapy supervision through didactic presentation, supervised experience of actual supervisory practice, and reflective interaction. This course meets the specifications required for the Approved Supervisor Designation of the American Association of Marriage and Family Therapy.

FAD 6607. Randomized Clinical Trials (3). Prerequisites: Graduate standing and graduate courses in research methods and statistics. This course presents state-of-the-art methods in the design, implementation, interpretation, and reporting of randomized clinical trial (RCT) research applicable to marriage and family therapy. Methodological controversies, proposed solutions, and ethical issues are discussed.

FAD 6608. Effectiveness and Translation Research (3). This course provides students with knowledge of research approaches that investigate the effectiveness, dissemination, implementation, and adaptation of clinical interventions to communities and populations. Emphasis is given to issues of effectiveness and translation research relevant to marriage and family therapy.

FAD 6916. Outcome Research in Marriage and Family Therapy (3). Prerequisite: Admission to Marriage and Family Therapy Program or instructor permission. This course is designed to provide students with an overview of psychotherapy outcome research in general and in marriage and family therapy (MFT) outcome research in particular.

FAD 6917. Research Methods in Family and Child Sciences (3). Prerequisites: At least one graduate-level research course, doctoral students only, statistics, permission of the instructor. Overview of research methods currently in use in studying individuals, families, and children.

FAD 6930r. Special Topics: Marital and Family Therapy–Topics Vary (3–9). Doctoral students only and instructor permission. Each topic may be taken only once. May be repeated within the same term to a maximum of nine semester hours.

FAD 6935r. Special Topics: Family and Child Development–Topics Vary (3–9). May be repeated to a maximum of nine semester hours but each topic may only be taken once.

FAD 6940r. Practicum in Marital and Family Therapy (1–5). (S/U grade only). Doctoral students in marriage and family therapy program only. May be repeated to a maximum of twenty-one semester hours.

FAD 8944r. Internship in Marriage and Family Therapy (1–12). (S/U grade only). Prerequisite: MFT major status. Corequisite: FAD 8964. This internship provides supervised practical field experience in various professional settings related to couple and family therapy, including human services, agencies, hospitals, educational facilities, and government. May be repeated to a maximum of twelve semester hours.

Other Courses

CHD 5912r. Supervised Research (1–3). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of three semester hours.

CHD 5942r. Supervised Teaching (1–3). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of three semester hours.

CHD 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

CHD 6980r. Dissertation (1–24). (S/U grade only).

CHD 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

CHD 8976r. Master's Thesis Defense (0). (P/F grade only.)

CHD 8985r. Dissertation Defense Examination (0). (P/F grade only.)

FAD 5912r. Supervised Research (1–3). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of three semester hours.

FAD 5942r. Supervised Teaching (1–3). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of three semester hours.

FAD 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

FAD 6980r. Dissertation (1–24). (S/U grade only).

FAD 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

FAD 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

FAD 8976r. Master's Thesis Defense (0). (P/F grade only.)

FAD 8985r. Dissertation Defense Examination (0). (P/F grade only.)

HOE 6366. Research Best Practices in Human Sciences (2). Prerequisite: Graduate standing. This course covers the areas of responsible conduct of research in the human sciences and the management principles for sponsored research.

**FAMILY DEVELOPMENT:
see Family and Child Sciences**

FILM:
see Communication; English; *General Bulletin*: Latin American and Caribbean Studies; Modern Languages and Linguistics; Motion Picture Arts

Graduate Department of FINANCE

COLLEGE OF BUSINESS

Website: <https://business.fsu.edu/departments/finance>

Chair: William A. Christiansen; **Professors:** Ang, Cheng, Clark, Humphrey, Da. Peterson; **Associate Professors:** Autore, Christiansen, Hutton, Knill, Perfect; **Assistant Professors:** Cocquemas, Dougal, Khoshnoud, Liu, Mityakov; **Teaching Faculty III:** Bliss, G. Smith; **Teaching Faculty II:** Mahon; **Teaching Faculty I:** De. Peterson, D. Smith, Syvrud; **Fannie Wilson Smith Eminent Scholar in Banking:** Humphrey; **Bank of America Eminent Scholar in Finance:** Ang; **Wells Fargo Professor of Finance:** Da. Peterson; **BB&T Professor of Finance:** Christiansen; **Gene Taylor/Bank of America Professor:** Cheng, Knill; **Dean L. Cash Professors of Finance:** Autore

The Department of Finance faculty has diverse interests spanning all areas of finance including financial management, investments, financial institutions and markets, multinational financial management, financial modeling, and quantitative methods. The faculty possesses a commitment to excellence in teaching, research, and service activities.

The fundamental responsibilities of the finance faculty are to preserve existing knowledge, to create new knowledge, and to transmit knowledge to others. To transmit knowledge to the graduate student a variety of teaching techniques and methodologies are employed, including case studies, lectures, simulations, computer modeling, oral and written presentations, discussions groups, study groups, co-research projects, and independent study and research.

The faculty members consider their research activity important for two reasons. First, the constant search for, and testing of, new knowledge is a basic foundation of economic progress. Second, as the financial and economic environment changes, current knowledge may become obsolete. The finance faculty members are involved in the development of new financial and management techniques so that their students are prepared to meet the challenges they will face during their careers. The faculty's research appears in many scholarly publications.

The finance faculty is dedicated to the advancement of the finance profession not only through its teaching and research activities but also through its involvement with outside government, business, academic, and professional organizations.

For additional information related to graduate Finance programs, contact the Graduate Office, *College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110*, or via e-mail at gradprograms@business.fsu.edu.

Combined Bachelor's in Real Estate/Master of Science in Finance Pathway (BS-RE/MSF)

There is substantial growing demand for students with advanced training and graduate preparation in the area of real estate finance and investment. Outstanding opportunities in real estate investment, lending, asset management, valuation, brokerage, and other service areas are expanding within institutional investors, investment banks, private equity firms, portfolio lenders, pension funds, and other service providers. Students with a strong combination of advanced analytical skills in finance and real estate are ideally suited to compete for positions emerging within leading companies.

Students will need to apply for admission to the combined BS-RE/MSF pathway in their junior year to take graduate courses in their senior year. Admission requires an overall GPA of 3.4 or higher, an upper-division GPA of 3.2 or higher, and an upper-division GPA of 3.2 or higher in their upper division finance and real estate courses. Admitted students are then able to register during their senior year for up to nine semester hours of graduate courses that count towards both the BS-RE and MSF degrees. Students admitted to the combined BS-RE/MSF pathway will still be required to apply for the MSF program, which begins in the second six-weeks of the summer semester and is completed the following spring semester, through the regular process in their senior year.

Master's Degree

The Master of Science in Finance (MSF) is a one-year, lock-step program that emphasizes the applied aspects of finance. All students start in the second six-weeks of the Summer semester and complete the program the following Spring semester. The program consists of thirty-two semester hours and includes a blend of theory, empirical analysis, and applications. The application deadline is March 1st.

The MSF program also offers a specialization in real estate finance and investment in which students focus on real estate finance courses instead of risk management and investment or international banking courses.

The college offers the Master in Business Administration (MBA) degree. As the ever-changing economic, political, and social trends place expanding needs and expectations on businesses, government agencies, and not-for-profit organizations, the demand for a wider range of financial and management skills has never been greater. The effective functioning of our economic and financial system is a concern to all members of our society. The MBA focuses on assembling, acquiring, and developing knowledge and skills that are related to the effective workings of our economic and financial system.

Doctoral Degree

A Doctor of Philosophy (PhD) in business administration is offered by the college. The Department of Finance offers a concentration in finance. The finance doctoral program facilitates the development of a solid foundation in the use of analytical and research tools applicable to finance problems and a thorough understanding of modern finance theory and applications. The primary objective of the curriculum is to develop the knowledge and skills necessary for prospective teachers and researchers in finance. The employment goal of most finance doctoral students is to teach and conduct research at the college or university level. However, many employment opportunities for PhD graduates exist in government and business.

The prospective finance doctoral student must meet college-wide admission standards and be recommended by the finance faculty. Students plan their program in consultation with the finance doctoral advisor and an advisory committee. The student must complete the courses in the finance primary area, a support area, and the analytical and research tools area. The support area can be chosen from another area of business or from a non-business discipline such as economics, mathematics, or statistics. Extensive student-faculty interaction is stressed throughout the program and culminates in the completion and defense of a dissertation under the guidance of the finance faculty.

Definition of Prefixes

ECP—Economic Problems and Policy

FIN—Finance

GEB—General Business

MAN—Management

Graduate Courses

Master's

Note: The 5000-level courses are reserved exclusively for graduate students. Courses which may be repeated for credit are designated by “r” immediately following the course number.

ECP 5706. Economic Analysis for Management (3). An examination of managerial concepts underlying business activity as related to the production of management and the process of decision making.

FIN 5108. Fundamentals of Personal Finance (3). This course covers personal finance and financial planning and is an introduction to an individual's financial decisions. Course topics include budgeting, saving, insuring, debt servicing, investing, retiring, and estate planning by individuals. Cannot be applied for credit for any graduate business degree.

FIN 5306. Investment Banking (3). This course introduces the structure and major activities of investment banks, including trends in the investment banking business.

FIN 5317. Financial Institutions and Risk Management (3). Prerequisites: FIN 4424 and FIN 4504 or their equivalents. This course covers the identification of key risks facing bank managers, as well as modern techniques for measuring, pricing, and managing those risks.

FIN 5425. Problems in Financial Management (3). Prerequisite: ACG 5026. This advanced-case course includes an in-depth study of topics such as the investment, financing, and dividend decisions of the firms and the valuation theory.

FIN 5455. Financial Data Analytics (3). Prerequisites: FIN 4424 and FIN 4504. This course provides an introduction and understanding of how financial data analytics are used in business, specifically through the use of R. Students develop data analysis skills that enable them to implement financial modeling across a variety of topics while utilizing a variety of common financial and economic data sources.

FIN 5515. Investment Management and Analysis (3). Prerequisite: FIN 5425. This course offers an analysis of financial assets with emphasis on the securities market, the valuation of individual securities, and portfolio management.

FIN 5537. Financial Derivatives and Risk Management (3). Prerequisites: FIN 4504 or FIN 5515 or equivalent. This course covers issues related to the pricing and application of futures, swaps, and options. Emphasis is placed on different methods of valuing derivative securities and of hedging macroeconomic and firm-specific risks. The course examines real-world examples of derivative uses and how they impact firm value.

FIN 5545. Fixed Income Securities (3). This course describes important fixed income securities and markets, and develops tools for valuing fixed income securities and managing interest rate risk. The course covers traditional bonds and term structure concepts as well as fixed income derivatives and interest rate modeling.

FIN 5605. Multinational Financial Management (3). Environment of international markets and institutions, with emphasis on implications of international business on capital budgeting, working capital management, and capital procurement.

FIN 5840. Applied Econometrics in Finance (3). Prerequisites: FIN 4504 or FIN 4424 or equivalent. This course covers statistical techniques commonly employed in financial studies. Students examine actual applications within a variety of financial studies in order to learn how to conduct statistical tests and interpret their results, and also familiarize themselves with WRDS and a variety of databases in order to learn how to conduct research.

FIN 5906r. Directed Individual Study (1–3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of nine semester hours.

FIN 5907r. Special Studies in Management (1–3). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of nine semester hours.

FIN 5917r. Supervised Research (1–3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. For master's candidates only. A maximum of three hours may apply toward the master's degree. May be repeated to a maximum of five semester hours.

FIN 5935r. Seminar on Current Topics in Finance (3). In-depth study of current topics in finance. May be repeated to a maximum of three times as topics vary.

GEB 5907r. Special Studies in Business (1–3). May be repeated to a maximum of three semester hours.

GEB 5932r. Professional Development (1–3). This course surveys professional development and familiarizes students with various aspects of successful career preparation and position acquisition, as well as crucial team participation skills and an understanding of workplace dynamics.

MAN 5716. Business Conditions Analysis (3). Problems of managing the firm in relation to the changing economic environment. Analysis of major business fluctuations and development of forecasting techniques.

Doctoral

Note: The doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level.

FIN 6449. Seminar in Finance (3). This seminar focuses on the corporate finance literature with topics including the theory of financial management, cash and working capital management, capital budgeting and rationing; and financing decisions of the firm.

FIN 6527. Seminar in Finance - Investments (3). Prerequisite: FIN 6842. This seminar studies the development of investment theories and empirical research. Topics include asset pricing, utility analysis, risk measurement, the structure and efficiency of security markets, as well as other current issues in investments.

FIN 6709. Seminar in Finance (1–3). The advanced study of financial institutions and markets, monetary theory and policy, economic forecasting, and domestic and international capital markets.

FIN 6804. Foundations of Financial Theory (3). This course places emphasis on the foundations of financial theories and provides an in-depth examination of the major theoretical developments in finance, including the study of related empirical tests.

FIN 6842. Research Methods in Finance (3). Prerequisite: FIN 6804. This course offers a critical examination of empirical research in finance and its related issues including design, methodology, analysis, and critique. Students utilize financial databases with appropriate quantitative techniques to design and conduct empirical research.

FIN 6917r. Supervised Research (1–3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five semester hours.

FIN 6946r. Supervised Teaching (1–3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five semester hours.

FIN 6980r. Dissertation (1–12). (S/U grade only). A minimum of twenty-four semester hours is required.

FIN 8964r. Doctoral Preliminary Examination (0). (P/F grade only.)

FIN 8985r. Dissertation Defense Examination (0). (P/F grade only.)

GEB 6904r. Readings For Examination (1–12). (S/U grade only). Prerequisite: All coursework required for PhD. This course is designed for PhD students who have completed all of their required coursework and are preparing to sit for their preliminary examinations in the current semester. May be repeated to a maximum of twenty-four semester hours.

**FINANCIAL MATHEMATICS:
see Mathematics**

FOOD SCIENCE:

see Nutrition, Food, and Exercise Sciences

FOOD SERVICE SYSTEMS:

see *General Bulletin* - Hospitality; Nutrition, Food, and Exercise Sciences

FOREIGN/BIBLICAL LANGUAGES, LITERATURE IN TRANSLATION:

see Modern Languages and Linguistics

FOREIGN LANGUAGE EDUCATION:

see Teacher Education; Modern Languages and Linguistics

FRENCH LANGUAGE, LITERATURE IN TRANSLATION:

see Modern Languages and Linguistics

GENETICS:

see Biological Science

**Graduate Program in
FIRE DYNAMICS**

Administered by the Department of Scientific Computing and the Geophysical Fluid Dynamics Institute (GFDI)

COLLEGE OF ARTS AND SCIENCES

Website: <https://gfdi.fsu.edu/fire-dynamics>

Program Director: Kevin Speer; **Coordinating Committee:** Speer (EOAS/Oceanography), Dewar (EOAS/Oceanography), Hoeflich (Physics), Moore (Mathematics); **Professors:** Beerli (Scientific Computing), Bourassa (EOAS & GFDI), Cai (EOAS & GFDI), Chen (Civil & Environmental Sciences and GFDI), Chicken (Statistics & GFDI), Clarke (EOAS & GFDI), Dewar (EOAS & GFDI), Elsnor (Geography & GFDI), Erlebacher, Gunzburger (Scientific Computing), Hart (EOAS), Hoeflich (Physics & GFDI), Huettel (EOAS & GFDI), Liu (EOAS), Meyer-Baese (Scientific Computing), Misra (EOAS), Musslimani (Mathematics & GFDI), Nicholson (EOAS), Ray (EOAS), Peterson, Plewa, Shanbhag, Slice (Scientific Computing), Speer (EOAS & GFDI), Sussman (Mathematics & GFDI), Tawfiq (Civil & Environmental Engineering and GFDI), Ye (EOAS & GFDI); **Associate Professors:** Ahlquist (EOAS), Lemmon (Scientific Computing), Sura (EOAS & GFDI), Wu (EOAS); **Assistant Professors:** Chagnon (EOAS), Collins (Physics & GFDI), Huang (Scientific Computing), Moore (Mathematics & GFDI), Quaife (Scientific Computing & GFDI), Tang (Civil & Environmental Engineering and GFDI), Wang (EOAS), Yaghoobian (Mechanical Engineering and GFDI); **Research Affiliates:** Goodrick (USDA), Hiers, Rowell (Tall Timbers Research Station)

Program Overview

The program is about the study of fire in nature as a fluid dynamical phenomenon, with complex physical, chemical, and turbulent interactions with the environment. Our program emphasizes basic mathematical and physical concepts, the application of atmospheric dynamical principles, and supports both laboratory and field experimental inquiry. The program in fire dynamics may be of interest to: physical science and mathematically prepared students who are interested in the environment and natural systems; meteorology students interested in the role of aerosols, particulates, and gases emitted by forest fires and prescribed burning; physics or engineering students desiring to apply their knowledge to combustion in a natural environment; wildland fire experts who desire to further their academic career; computationally oriented students who desire to solve a problem of direct importance to society; and management and agency personnel who deal with the impact of wild land fires.

Facilities

Geophysical Fluid Dynamics Institute facilities include a large modern laboratory for hydrodynamics experiments, a colloquium room and reading room (furnished with books and periodicals in fluid dynamics, classical physics, applied mathematics, geophysical sciences, and astrophysical sciences), a photographic and illustrations laboratory, a large modern machine shop, a precision instrument-makers laboratory, and faculty and student offices. Institute facilities also include several precision rotating turntables, a six-meter water channel, convection tanks, temperature controlling systems, general and digital photographic systems, multi-channel data acquisition systems, laser facilities, various machine tools, and other electronic equipment. The institute houses a facility for measuring ocean turbulence as well.

Admission Requirements

Note: Please review all University and college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Students must pass the existing admissions procedure for regular GFDI students and be admitted by recommendation of the GFDI Graduate Program Committee. Students are accepted into the program on the basis of their academic record, their Graduate Record Examinations (GRE) and/or Test of English as a Foreign Language (TOEFL) score, and their letters of recommendation. To be admitted, students must have achieved a "B" average (a 3.0 average on 4.0 scale for all upper division work) of their baccalaureate degree (or any graduate degree work they may have taken) and achieved a GRE score at the 50th percentile or better on the verbal section and on the quantitative section. Students expecting to receive financial assistance will need a significantly higher GRE score. Foreign nationals are expected to have a score of 80 or better on the Internet based TOEFL, 6.5 on the IELTS examination or 77 on the MELAB examination.

Doctoral Degree

The doctoral degree is awarded in recognition of the student's broad knowledge of fire dynamics and the student's ability to do original, independent research in fire dynamics. To complete the requirements for a doctoral degree, the student must 1) complete the requisite course work, 2) satisfactorily complete preliminary examinations for admission to candidacy, 3) choose a major professor and supervisory committee, 4) submit and defend a dissertation prospectus to his/her supervisory committee, and 5) complete independent research culminating in a written dissertation which must be successfully defended to the student's supervisory committee.

Coursework

Major requirements include ISC 5305, ISC 5315, fire dynamics core courses, plus 12 credit hours from elective courses.

Fire Dynamics Core Courses:

Special topics courses in collaboration with Tall Timbers Research Station (TTRS), the Jones Ecological Research Center, Apalachicola National Forest, Florida Forest Service, and the US Forest Service (USFS) in Athens, GA. Certification to work in active fireline operations. These will be developed as real classroom courses with letter grades.

- GFD 5XXX** Intro to Fire Operations (NWCG S-130/S-190) with written project
- GFD 5XXX** Fire Behavior and Ecology (TTRS, USFS)
- GFD 5XXX** Fire Dynamics Laboratory (TTRS)
- GFD 6925** Geophysical Fluid Dynamics Colloquium (1). (S/U grade only.)
- GFD 6935r** Seminar (1–2).

Elective Courses:

Engineering:

- CEG 5125** TBA
- CEG 5415** TBA
- CEG 5515** TBA
- CEG 5635** TBA
- ECH 5934r** Special Topics in Chemical Engineering (3).
- EGM 5456** TBA
- EGM 5810** Viscous Fluid Flows (3).
- EGM 6845** Turbulent Flows (3).
- EML 5422** Fundamentals of Propulsions Systems (3).
- ENV 5045** Environmental Systems Analysis (3).

Geological Sciences:

- GLY 5425** Tectonics (3).
- GLY 5455** Introduction to Geophysics (3).
- GLY 5465** Geomechanics (3).
- GLY 5575** Coastal Geology (3)
- GLY 5826** Numerical Modeling of Groundwater Flow (3).
- GLY 5827** Principles of Hydrology (3).
- GLY 5868r** TBA

Mathematics:

- MAD 5708** TBA
- MAD 5738** Numerical Solution of Partial Differential Equations I (3)
- MAD 5739** Numerical Solution of Partial Differential Equations II (3)
- MAD 6408r** Advanced Topics in Numerical Analysis (3)
- MAP 5207** Optimization (3)
- MAP 5217** Calculus of Variations (3)
- MAP 5345** Elementary Partial Differential Equations I (3).
- MAP 5346** Elementary Partial Differential Equations II (3).
- MAP 5423** Complex Variables, Asymptotic Expansions, and Integral Transforms (3).
- MAP 5431** Introduction to Fluid Dynamics (3).
- MAP 5441** Perturbation Theory (3).
- MAP 5512** TBA
- MAP 5513** Wave Propagation Theory (3).
- MAP 6437r** Advanced Topics in Applied Mathematics (3).
- MAP 6939r** Advanced Seminar in Applied Mathematics (1). (S/U grade only.)

Meteorology:

- MET 5311** Advanced Dynamic Meteorology I (3).
- MET 5312** Advanced Dynamic Meteorology II (3).
- MET 5340r** Large-Scale Atmospheric Circulations (3)
- MET 5471** Satellite Remote Sensing of Planetary Atmospheres (3)
- MET 5541r** Dynamical Weather Prediction (3)
- MET 6308r** Advanced Topics in Dynamical Meteorology (3)
- MET 6561r** Advanced Topics in Synoptic Meteorology (3)

Oceanography:

- OCP 5056** Introduction to Physical Oceanography (3)
- OCP 5253** TBA
- OCP 5256** Fluid Dynamics: Geophysical Applications (3)
- OCP 5285** Dynamic Oceanography (3)
- OCP 5551** Physics of the Air-Sea Boundary Layer (3)
- OCP 5930r** Special Topics in Physical Oceanography (1–3)
- OCE 5009L** Coastal Oceanography and Marine Field Methods (4)

Physics:

- PHY 5246** Theoretical Dynamics (3)
- PHY 5346** Electrodynamics A (3).
- PHY 5347** Electrodynamics B (3).
- PHY 5524** Statistical Mechanics (3)

Statistics:

- STA 5106** Computational Methods in Statistics I (3).
- STA 5206** Analysis of Variance and Design of Experiments (3).
- STA 5326** Distribution Theory and Inference (3).
- STA 5327** Statistical Inference (3).
- STA 5440** Introductory Probability I (3).
- STA 5447** Probability Theory (3).
- STA 5807r** Topics in Stochastic Processes (3).

Scientific Computing:

- ISC 5226** Numerical Methods for Earth and Environmental Sciences (3).
- ISC 5227** Survey of Numerical Partial Differential Equations (3).
- ISC 5228** Monte Carlo Methods (3).
- ISC 5307** Scientific Visualization (3).
- ISC 5316** Applied Computational Science II (4).

Note: Course descriptions can be found under the respective departmental listings.

Graduate Department of GEOGRAPHY

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <http://geography.fsu.edu/>

Chair: James Elsner; Professors: Elsner, Horner, Mesev, Yang; Associate

Professors: Pau, Uejio, Zhao; Assistant Professors: Feng, Gergan, Johnson, Lester, Mallory, McCreary, Ponder, Wong; Affiliate and Adjunct Faculty: Doel, Hart, Miller, Migliorelli, Molina, Nickerson, Puiatti, Quinton, Weisman, Windus

The Department of Geography at Florida State University offers graduate degree programs at the master's and doctoral levels designed to equip students with the technical skills and intellectual creativity required in a changing labor market. Faculty and students investigate critical issues of society, geospatial inquiry, and the physical environment that embrace methodological and theoretical solutions, including cities and urban flows; critical geographies of autonomy and liberation; urban GIS and remote sensing; climate change; risk and society; and biodiversity, conservation, and management.

Current work under investigation includes transportation optimization, land use/land cover change, urban growth, population mapping, regionalization and localization theory, political ecology, race and indigeneity, Black geographies, environmental conflict and policy, local economic development, access to health, urban sustainability, environmental health, hurricane forecasting, fishing rights and marine conservation, tropical forests and grasslands, coastal and estuarine ecosystems, energy consumption and conservation, and resource management. The Department's foundation in geo-spatial sciences is built upon expertise in GIS, remote sensing, and geo-spatial analysis and is supported by access to a purpose-built lab (running ESRI and ERDAS products), a working relationship with the Institute for Science & Public Affairs, and membership of the Atlanta Data Center consortium (accessing confidential federal demographic, business, and health microdata). A master's degree in GIScience is popular with students intending to enter the GIS industry as program managers, systems analysts, programmers, and application directors for companies utilizing GIS at state and federal levels, such as the EPA, Fish & Wildlife, FEMA, Forest Service, and the National Geospatial Intelligence Agency, as well as environmental agencies, real estate, and financial institutions.

Graduate students design programs of study focusing on important social issues, geospatial techniques, and environmental problems. While in residence, funded students gain valuable experience and skills in teaching and research, as well as assisting faculty in the classroom and on study projects. By the time they graduate, PhD students will have experience as instructors holding full responsibility teaching undergraduate courses and many will have published papers in scholastic journals and presented results of their research at professional conferences. Financial support is available for qualified students, currently the stipend for the MS and PhD programs is approximately \$18,000.

Requirements

Applicants must hold a degree in Geography or a related field from an accredited college or university. Individuals holding degrees in fields other than geography are welcome to apply but may need to make up deficiencies, as judged by the graduate director and major professor. Minimum requirements for admission are a 3.0 GPA and GRE scores of at least 144 (Quantitative) and 153 (Verbal). Students whose native language is not English, in addition to the above, must also score a minimum of 600 on the paper-based, 250 on the computer-based, or 100 on the Internet-based Test of English as a Foreign Language (TOEFL), and at least 45 on the SPEAK test. If financial assistance is requested, applications will be considered from January 15 until the deadline of March 1 for Fall semester entry. For the Spring semester, the application deadline is October 1. For more information, visit the department website (geography.fsu.edu), or contact the Graduate Program Director, Dr. Tingting Zhao (tzhao@fsu.edu) in Bellamy 304 or the Academic Program Coordinator, Ms. Allison Young (aryoung@fsu.edu) in Bellamy 301.

Master's Program

Non-Thesis Option

The non-thesis option master's program is a minimum of thirty graduate credit hours (5000 level or higher) and is designed as a flexible course of study allowing the student, in consultation with the major professor, to develop a specialized program tailored to the student's interests and career goals.

Students entering this program generally seek the master's as a terminal degree. The Department offers both the Master of Science (MS) and Master of Arts (MA) degrees.

Students are required to take three core courses (nine credit hours) designed to provide a solid foundation for investigating geographic issues relating to social and environmental problems. Students who have taken similar courses at the bachelor's level may petition for exemption. Students must earn a grade of "B" or better in each of the core courses:

GEO 5058 Survey of Geographic Thought (3)

GEO 5118C Introduction to Geographic Research (3)

GEO 5165C Quantitative Geography (3)

OR

GEO 6113 Qualitative Geography (3)

In addition, each student selects at least eight elective courses (twenty-four credit hours) in consultation with the major professor that must be passed at a grade of "B-" or better.

Thesis Option

The thesis option master's program is a minimum of thirty graduate credit hours (5000 level or higher) and is designed to provide for and certify a student's mastery of the discipline. This requires both breadth of geographic knowledge, acquired through a range of coursework, and depth of experience, achieved through original research culminating in a thesis. Master's students planning to pursue a doctoral degree should take the thesis option. The Department offers both the Master of Science (MS) and Master of Arts (MA) degrees.

Students are required to take three core courses (nine semester hours) designed to provide a solid foundation for investigating geographic issues relating to social and environmental problems. Students who have taken similar courses at the bachelor's level may petition for exemption. Students must earn a grade of "B" or better in each of the core courses:

GEO 5058 Survey of Geographic Thought (3)

GEO 5118C Introduction to Geographic Research (3)

GEO 5165C Quantitative Geography (3)

OR

GEO 6113 Qualitative Geography (3)

In addition, each student selects at least six elective courses (eighteen credit hours) and must complete six thesis hours in consultation with the graduate advisor or major professor that must be passed at a grade of "B-" or better.

With the advice of a supervisory committee, the student prepares a written thesis prospectus that identifies a substantive geographic topic and demonstrates familiarity with the literature and methods appropriate to its solution. The prospectus is developed in consultation with the major professor. When the major professor deems it ready, the student must orally defend the prospectus. Full-time students should plan to defend the prospectus by the end of the first academic year or beginning of the second year. Once the prospectus has been accepted, the student begins the research and writing process, working with the major professor on initial drafts and drawing the supervisory committee into the process over time. The final step involves an oral defense of the thesis after the complete working draft has been accepted by the major professor. The defense is open to Departmental faculty and graduate students.

Applied GIScience Option

The applied MS program in Geographic Information Science (GIScience) is thirty graduate credit hours. It is aimed at individuals who want to develop location-based mapping skills by learning market-leading software (ESRI and ERDAS) in two purpose-built labs, along with a capstone internship to gain valuable real-life experience in organizations using GIS. Students must earn a minimum of thirty graduate credit hours (5000 level or higher), which includes six credit hours in a capstone project. This fast-track option allows students to complete their degree in twelve months.

Students are required to take four core courses (fifteen to seventeen credit hours) all at a grade of "B-" or better.

Required courses:

GIS 5034 Introduction to Remote Sensing (3)

AND

GIS 5034L Introduction to Remote Sensing Lab (1)

GIS 5101 Geographic Information Systems (3)

AND

GIS 5101L Geographic Information Systems Lab (1)

GIS 5106 Advanced Geographic Information Science (3)

GIS 5950 GIScience Capstone (6)

A further four or five courses (twelve to fifteen credit hours) must be chosen from approved lists and passed at a grade of “B–” or better. GEO 5908 Directed Individual Study is allowed to a maximum of two credit hours.

Financial support (currently \$14,000) is available for rare cases and qualified students. For more information contact the Graduate Program Director, Dr. Christopher Uejio, 317A Bellamy or cuejio@fsu.edu, or visit the Department’s Web site at geography.fsu.edu.

PhD Program

The doctoral program is forty-eight graduate credit hours, composed of twenty-four coursework hours and twenty-four dissertation hours: the three required courses (nine hours) of the master’s degree (if not taken previously), one additional core course (three hours), at least four elective courses (twelve credit hours), and dissertation hours (twenty-four credit hours). All doctoral students must pass qualifying exams, including written and oral portions, for admission to candidacy for the doctoral degree. The supervisory committee will determine pass or fail by a majority vote. Students who fail these exams after two attempts will be dropped from the doctoral program. A student admitted to candidacy is eligible to register for dissertation hours. Completion of the dissertation normally requires at least one year. The student prepares a written dissertation prospectus that demonstrates the potential to conduct original research making a significant contribution to knowledge. Once the prospectus is deemed acceptable to the major professor and the supervisory committee, the student begins the research and writing process. The final step involves an oral defense of the dissertation, which is open to public viewing. During the dissertation defense, all committee members and the student must attend the entire defense in real time, either by being physically present or participating via distance technology.

Students are required to take four core courses (twelve credit hours) and earn at least a “B” in the following:

GEO 5058 Survey of Geographic Thought (3)

GEO 5118C Introduction to Geographic Research (3)

GEO 5165C Quantitative Geography (3)

OR

GEO 6113 Qualitative Geography (3)

GEO 6093 Professional Development Geography (3)

A further four courses (twelve credit hours) must be chosen from approved lists and passed at a grade of “B–” or better.

Financial Assistance

The Department offers a limited number of graduate assistantships. These are initially awarded for two semesters and generally entail a stipend of approximately \$18,000 for PhD and Master’s students, with possibility of additional support for teaching summer classes. Support in following years is contingent on satisfactory performance academically and in assistantship duties, for a maximum of two years for master’s students and four years for doctoral students. Department assistantships usually include a waiver of tuition.

Department assistantships require that recipients perform instructional or research duties within the Department. Students holding assistantships are required to provide between thirteen and twenty hours of service to the Department per week. Most master’s students assist faculty in the classroom or online, while most PhD students have full responsibility teaching undergraduate courses, gaining valuable instructional experience. University policy stipulates that all students receiving financial assistance in a given semester must register for nine credit hours, including summers. For more information, contact the Graduate Program Director, Dr. Christopher Uejio (cuejio@fsu.edu) or Academic Program Coordinator, Ms. Allison Young (aryoung@fsu.edu).

Definition of Prefixes

GEO—Geography: Systematic

GIS—Geography: Information Science

Graduate Courses

Note: Many courses are taught as seminars in current topics (see GEO 5934r below). Contact the Department for current offerings.

GEO 5058. Survey of Geographic Thought (3). History of geography as a discipline, ranging from classical origins to contemporary philosophical schools and debates.

GEO 5115. Environmental Field Methods (3). Design, implementation and presentation of a field-based project employing sampling, GIS, GPS, and exploratory statistical methods.

GEO 5118C. Introduction to Geographic Research (3). Survey of research design and methods, strengths and weaknesses of alternative strategies, reliability and validity measures, and methods of writing.

GEO 5165C. Quantitative Geography (3). Introduces probability theory and descriptive and inferential statistics in geographic research, including chi-square tests, logit models, correlation techniques, geo-statistics, analysis of variance, simple and multiple regression, and factorial analysis.

GEO 5305. Biogeography (3). This course examines the spatial distributions of flora and fauna, vegetation dynamics, ecosystem change, and issues related to biodiversity, invasive species, wildfire policy, and debates over wilderness.

GEO 5358. Environmental Conflict and Economic Development (3). Examines controversies over the use, transformation, and destruction of nature, including political ecology.

GEO 5378. Landscape Ecology (3). Prerequisite: GIS 5101. This course offers a review of methods on analyzing geographic patterns of natural phenomena, including ecological conservation, natural resource management, landscape and urban planning, as well as human-environmental interactions and implications. Familiarity with software packages such as ArcGIS is assumed.

GEO 5393. Geography of Marine Conservation (3). This course develops the major conservation issues in coastal and marine systems worldwide, including the science, management and policy dimensions of marine conservation. The course explores critical conservation problems facing marine ecosystems; and at the same time evaluates their causes and threats from climate change, overfishing, and other types of natural resource extraction and management failures. The course discusses solutions, both science-based and social science-based (particularly economics, management and policy implementation).

GEO 5406. Black Geographies (3). This course builds on the historical, political, and spatial contexts in which geographies of black populations emerge and are perpetuated across the United States and elsewhere. The course reaffirms discourse in which Black communities throughout the African Diaspora are continually marginalized spatially, and the ways in which black communities themselves produce geographic space. It will provide a forum for discussion on race, racism, as well as spatial marginalization/segregation.

GEO 5417. Race and Place (3). This course integrates various concepts and topics concerned with the spatial construction and effects of race and ethnicity, including identity, segregation, political and cultural landscapes, and environmental justice.

GEO 5425. Cultural Geography (3). The study of the processes by which various cultural features have diffused throughout the world. Emphasis is on the contemporary cultural landscape, particularly that of the United States.

GEO 5451. Medical Geography (3). This course reviews the literature and techniques for locating, accessing, and understanding public health evidence, as well as evaluating environmental hazards that pose risks to human health and safety and policy repercussions to public health provisions.

GEO 5453. Global Health (3). This course explores and evaluates public health problems and examines global health inequality.

GEO 5472. Political Geography (3). Examination of how political processes play out over space, from the local to the global levels. Topics include electoral geographies, nationalism and war, and current geopolitics.

GEO 5545. Advanced Economic Geography (3). In-depth examination of several themes in the analysis of economic landscapes, including input-output analysis, historical materialism, post-Fordism, services and telecommunications, and the global economy.

GEO 5704. Transport Geography (3). This course offers a review of the literature and techniques for the spatial impacts of transportation systems, including functionality, and their role on society, the economy, energy, the environment, and sustainability.

GEO 5908r. Directed Individual Study (1–6). (S/U grade only). May be repeated to a maximum of nine semester hours.

GEO 5918r. Supervised Research (1–3). (S/U grade only). A maximum of three semester hours may apply to the master’s degree. May be repeated to a maximum of three (3) semester hours.

GEO 5934r. Seminar in Current Topics (1–3). A variety of subjects is offered on an occasional basis under the heading of “Special Topics.” Recent offerings include the Geography of Hunger, Advanced GIS, and Globalization.

GEO 5947r. Supervised Teaching (1–3). (S/U grade only). A maximum of three hours may apply to the master’s degree. May be repeated to a maximum of three semester hours.

GEO 5971r. Thesis (1–9). (S/U grade only). A minimum of six semester hours is required.

GEO 6093. Professional Development in Geography (3). This course reviews procedures for students to assume academic and non-academic employment arising from the attainment of a PhD in Geography.

GEO 6113. Qualitative Geography (3). This course uses a mix of theoretical and practical approaches to examine the reciprocal relationship between social theory and qualitative research methodology. The course investigates the political and institutional contexts in which geographers conduct their work, and how power relations, researcher positionality, and research ethics inform qualitative research practice.

GEO 6980r. Dissertation (1–12).

GEO 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

GEO 8976r. Master's Thesis Defense (0). (P/F grade only.)

GEO 8985r. Dissertation Defense (0). (P/F grade only.)

GIS 5034. Introduction to Remote Sensing (3). Corequisite: GIS 5034L. This course covers remote sensing foundations and the use of remote sensing for environmental and cultural applications. Focus is on the foundations of remote sensing, aerial photography and photogrammetry, characteristics of various sensing systems, remote sensing applications, and an introduction to digital image processing.

GIS 5034L. Introduction to Remote Sensing Lab (1). Corequisite: GIS 5034. This lab provides practice with the concepts and techniques in remote sensing. Specifically, the lab covers the foundations of remote sensing, aerial photography and photogrammetry, characteristics of various sensing systems, remote sensing applications, and basic skills in digital image processing.

GIS 5038C. Advanced Remote Sensing (3). This course focuses on quantitative approaches to the analysis of remotely sensed data. Digital multitemporal, multispectral, multi-sensor remote sensing images acquired by a range of sensors, and the application of digital remote sensing for urban and environmental analysis will be discussed. Quantitative methods in digital remote sensing image enhancement, radiometric normalization, rectification, georeferencing, and classification.

GIS 5073. GIS Land Survey Methods (3). This course focuses on the theory and practice of techniques that locate objects in space using land survey methods.

GIS 5101. Geographic Information Systems (3). Corequisite: GIS 5101L. This course is a hands-on course on GIS topics, including locational control, spatial data structures, spatial cartographic statistics, modeling and analysis, trends in decision support, sensors, and geographic methods.

GIS 5101L. GIS Lab (1). Corequisite: GIS 5101. Laboratory computer practice in the use of geographic information system software.

GIS 5103. GIS Programming (3). This course explores contemporary research methods and applications in analytical geography, particularly computational skills of geographical information systems (GIS) practitioners. This course examines how advances in spatial data analysis and geographical modeling have largely outpaced the capabilities of standard statistical software. Students evaluate how the multidisciplinary nature of the spatial sciences often translates into the need to deal with disparate data sources, formats and programming languages.

GIS 5106. Advanced Geographic Information Science (3). Prerequisite: GIS 5101. Subjects covered include any combination of the following: spatial cognition; geographical representation; spatial pattern analysis; linear modeling; spatial autocorrelation; spatial modeling and simulation; spatial interpolation; digital terrain modeling and visualization; spatial data mining and reasoning; data quality and uncertainty; mobile GIS; Internet GIS.

GIS 5111. Spatial Modeling in Geographic Information Science (3). This course introduces advanced spatial modeling theories and associated techniques in GIS. Topics addressed include spatial optimization, GIS for transportation, spatial decision support systems, and other advanced quantitative techniques. Emphasis is on fostering a broad understanding of spatial modeling and connecting spatial modeling techniques to students' substantive domains.

GIS 5112. GIS Databases (3). This course is a practical demonstration of the structure and functionality of GIS databases; and their query and manipulation of digital spatial data. The course focuses on core data structures and modeling concepts in databases to understand the technical aspects of GIScience.

GIS 5122. Applied Spatial Statistics (3). This course offers advanced spatial statistical methods and complex models applied to phenomena represented by locational data, using techniques such as spatial regression, smoothing, point patterns, kernel density estimations, and clustering algorithms.

GIS 5131. Geographic Visualization (3). This course examines the design and implementation of effective visualization of geographic data, phenomena, patterns, and processes. The theoretical basis is formed by cartography, visual perception and communication models. Emphasis is placed on the creation, analysis, and display of statistical surfaces. Students explore trends in cartography visualization methods including interactive and animated mapping techniques.

GIS 5305. Geographical Information Systems for Environmental Analysis and Modeling (3). Technical topics covered include space-time variability in environmental data, environmental data acquisition and integration, interpolating environmental data, error and uncertainty, environmental decision support systems, environmental modeling techniques, and the integration of geospatial technologies with environmental modeling systems. Applications include hydrological modeling, terrain modeling and landform analysis, landscape pattern analysis, land suitability analysis, soil erosion modeling, and wildfire modeling.

GIS 5306. Environmental Change Modeling (3). Prerequisite: GIS 4043 or GIS 5101. This course looks at various modeling techniques for simulating and understanding environmental change, and how such changes affect the human dimension. Familiarity of basic modeling packages, such as ArcGIS, is assumed.

GIS 5318. Climate Change and Ecosystems (3). This course uses geographic information systems (GIS) to handle and map evidence for shifts in ecosystem responses to climate change. The course taps into the debate on climate change with well-documented evidence to support the acceleration of global climatic alterations. The course demonstrates evidence such as consistent patterns of ecological responses—including directional shifts in phenology and species distributions—have important consequences for population dynamics, species coexistence, and widespread impacts on human and natural systems.

GIS 5331. Florida GIS Applications (3). This course evaluates the breadth of environmental and social applications of geographic information systems specific to the State of Florida.

GIS 5400. Geographic Information Systems Applications in Social Sciences (3). In this course, practical examples from the fields of health, economic geography and real estate, housing, transportation, criminology, and others are used to illustrate how spatial analysis techniques are used to address problems in a GIS environment. Special consideration is given to the data needs of such operations, the implementation of methods in a GIS environment, and understanding the spatial assumptions and issues that underpin analyses.

GIS 5605. GIS Local Government (3). Prerequisite: GIS 5101. This course explores the professional and institutional application of GIS in government, industry and business.

GIS 5950. GIScience Capstone (6). Prerequisites: GIS 5034, GIS 5101 and GIS 5106. This course applies and demonstrates GIScience theory and techniques in a vocational environment.

GEOGRAPHY: REGIONAL

see Geography; *General Bulletin*: Latin American and Caribbean Studies

Graduate Program in GEOPHYSICAL FLUID DYNAMICS

Administered by the Department of Scientific
Computing and the Geophysical Fluid Dynamics
Institute (GFDI)

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.gfdi.fsu.edu/>

Program Director: Kevin Speer; **Coordinating Committee:** Speer (EOAS/Oceanography); Dewar (EOAS/Oceanography); Moore (Mathematics); Hoeflich (Physics); **Professors:** Bourassa, Cai (EOAS/Meteorology); Chicken (Statistics); Elsner (Geography); Hoeflich (Physics); Musslimani, Sussman, Wang (Mathematics); Clarke, Dewar, Huettel, Speer (EOAS/Oceanography); Chen, Tawfiq (Civil and Environmental Engineering); Gunzburger (Scientific Computing); Ye (EOAS/Geological Sciences); **Associate Professors:** Sura (EOAS/Meteorology); **Assistant Professors:** Collins (Physics); Aseel, Lee, Moore (Mathematics); Quaipe (Scientific Computing); Tang (Civil and Environmental Engineering); Yaghoobian (Mechanical Engineering); **Associates Emeritus:** Pfeffer (EOAS/Meteorology); Barcion, R. Krishnamurti (EOAS/Oceanography); **Research Affiliate:** Goodrick (U.S. Forest Service)

The Geophysical Fluid Dynamics (GFD) Program leads to a degree in Computational Sciences with a major in either GFD or Fire Dynamics. It is an interdisciplinary field of study whose primary goal is an improvement in our basic understanding of fluid flows that occur naturally, including such diverse topics as climate and paleoclimate, biogeochemical processes, hydrology and Karst dynamics, air-sea interaction, wild fire dynamics, double diffusive processes, and hurricane dynamics with strong links to the Applied Mathematics Program. The approach to this understanding is through quantitative analysis of observational records and theoretical, mathematical, numerical, and experimenting modeling. A geophysical fluid dynamicist must have a firm grasp of the fundamental principles of classical physics, knowledge of the techniques of applied mathematics, and an interest in the natural sciences. It follows that the course of study leading to a degree in geophysical fluid dynamics is a rewarding one in which the student gains an overview of the geophysical sciences not available from study in a single discipline.

The interdepartmental graduate program of study leads to the Doctor of Philosophy (PhD) degree; there is no master's degree offered. The program is administered by the Geophysical Fluid Dynamics Institute and has its own separate degree requirements. It differs from the regular departmental offerings in the earth sciences mainly by its interdisciplinary approach and emphasis on the fundamentals of mathematics, physics, and fluid dynamics, with less emphasis on descriptive material from any one discipline.

A major factor in the success of this PhD program is the strong support provided by the Departments of Earth, Ocean and Atmospheric Science (EOAS), Mathematics, Physics, Scientific Computing, and Statistics, and the College of Engineering. In particular, these departments offer a wide range of courses from which the student in geophysical fluid dynamics constructs an individualized curriculum. Faculty members of various departments who have an active research interest in geophysical fluid dynamics form the heart of the program by serving as advisors and instructors for the students in the program.

Facilities are situated in the **Geophysical Fluid Dynamics Institute**, whose primary function is to support and foster those theoretical, experimental, numerical, and observational studies of natural environmental fluid flows that transcend the traditional departmental disciplines.

These facilities include a large modern laboratory for hydrodynamics experiments, a colloquium room and reading room (furnished with books and periodicals in fluid dynamics, classical physics, applied mathematics, geophysical sciences, and astrophysical sciences), a photographic and illustrations laboratory, a large modern machine shop, a precision instrument-makers laboratory, and faculty and student offices. Institute facilities also include several precision rotating turntables, a six-meter water channel, convection tanks, temperature controlling systems, general and digital photographic systems, multi-channel data acquisition systems, laser facilities, various machine tools, and other electronic equipment. The institute houses a facility for measuring ocean turbulence as well.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Admission Requirements

Students may apply to the program through the Department of Scientific Computing or through Geophysical Fluid Dynamics Institute. Students are accepted into the program on the basis of their academic record in science and mathematics, their Graduate Record Examinations (GRE) and/or Test of English as a Foreign Language (TOEFL) score, and their letters of recommendation. To be admitted, students must have achieved a "B" average in the science and mathematics portions of their baccalaureate degree work (or any graduate degree work they may have taken) and achieved a GRE score at the 50th percentile or better on the verbal section and on the quantitative section. Students expecting to receive financial assistance (see below) will need a significantly higher GRE score. Foreign nationals are expected to have a score of 80 or better on the Internet-based TOEFL, 6.5 on the IELTS examination, or 77 on the MELAB examination.

The well-prepared student will have a strong background in mathematics and physics. The program director may, in some cases, admit students lacking formal credit in some areas, provided the deficiencies are overcome by subsequent coursework or study at Florida State University.

Completion

The program of study for students is individually tailored to meet their particular needs and interests. The formal requirements are few and include completion of coursework from several different departments with a grade of "B" or better, participation in a seminar at least two times, and mastery of modern computer techniques, particularly numerical analysis. The remainder of the curriculum is chosen by the advisory committee in consultation with the student based upon the student's program of study. There is no foreign language requirement. The remainder of the curriculum is normally chosen from among courses offered by several departments. Typically, students, in consultation with their advisory committee, will choose from among the following areas.

Engineering

Topics include: viscous fluid flows, turbulent flows, introduction to computational mechanics, water resources and environmental engineering, hydraulics, hydrology, and ground water.

Courses include: EGM 5810, 6845; ENV 5045.

Geological Sciences

Topics include: geophysics, geomechanics, geophysical methods, seismology, modeling of groundwater flow, hydrology.

Courses include: GLY 4451, 5425, 5455, 5465, 5556, 5573, 5575, 5825, 5826, 5827.

Mathematics

Topics include: numerical analysis, vector and tensor analysis, ordinary and partial differential equations, matrix algebra, integral transforms and asymptotics, perturbation theory, hydrodynamic stability, wave propagation theory.

Courses include: MAA 4402; MAD 5738, 5739, 6408r; MAP 5207, 5217, 5345, 5346, 5423, 5431, 5441, 5513, 6434r, 6437r, 6939r.

Meteorology

Topics include: atmospheric thermodynamics, atmospheric dynamics, large-scale atmospheric circulations, advanced topics in climatology, dynamical weather prediction, air/sea interaction, radiative transfer, satellite oceanography.

Courses include: MET 5311, 5312, 5340r, 5471, 5541r, 6308r, 6561r.

Oceanography

Topics include: ocean waves, stability of geophysical fluid flows, ocean dynamics and circulation, coastal ocean dynamics, main ocean thermocline, turbulence.

Courses include: OCP 5056, 5271, 5285, 5551, 5939r.

Physics

Topics include: intermediate modern physics, principles of thermodynamics, mechanics, electricity and magnetism, theoretical dynamics, electro-dynamics, radiative processes and transport in astrophysics (special topics in physics), statistical mechanics.

Courses include: PHY 3101, 4222, 4513, 4936, 5246, 5346, 5347, 5524.

Scientific Computing

Topics include: introduction to scientific programming, applied computational sciences I and II, numerical methods for earth and environmental sciences, applied ground water modeling.

Courses include: ISC 5305, 5315, 5226, 5236

Statistics

Topics include: computational methods in statistics, introduction to applied statistics, statistics in applications I, distribution theory and inference, statistical inference, nonparametric statistics, multivariate analysis, applied time series analysis.

Courses include: STA 5106, 5126, 5166, 5326, 5327, 5507, 5707, 5856

Note: Descriptions of these courses can be found under the departmental listings.

GERMAN LANGUAGE, LITERATURE IN TRANSLATION:
see Modern Languages and Linguistics

GERONTOLOGY:
see Aging and Public Policy, The Pepper Institute on; Urban and Regional Planning

GREEK LANGUAGE, LITERATURE: WRITINGS:
see Classics

GROWTH MANAGEMENT AND COMPREHENSIVE PLANNING:
see Urban and Regional Planning

GUIDANCE AND COUNSELING:
see Educational Psychology and Learning Systems

HEALTH AND AGING, PLANNING AND POLICY IN:
see Urban and Regional Planning

HEALTH EDUCATION:
see Teacher Education

Graduate HEALTH-RELATED PROGRAMS

Numerous health-related programs at Florida State University address issues of prevention, treatment, rehabilitation, health sciences, and policy formulation. As part of an effort to develop and promote a coordinated plan for these programs, the following section lists and describes, by program/department, areas of study, services, and (in some instances) certification opportunities for graduate students. For more detailed information and requirements, see individual program listings in this *Graduate Bulletin*.

College of Communication and Information

The School of Communication Science and Disorders has majors in speech-language pathology and offers the graduate degrees of Master of Science (MS) and Doctor of Philosophy (PhD). The scope of the School includes the whole of human communication, both normal and disordered, both face-to-face and mediated. Students learn the total processes of communication, develop analytical and communication skills, and obtain experience in evaluation, treatment, and research. For additional information, please refer to the "School of Communication Science and Disorders" chapter in this *Graduate Bulletin*, e-mail jennifer.kekelis@cci.fsu.edu, call (850) 644-2253, or visit <http://commdisorders.cci.fsu.edu/>.

The School of Communication Science and Disorders also administers three certificate programs: the Interdepartmental Certificate Program in Developmental Disabilities, the Bilingual Services Delivery undergraduate certificate, and the Graduate Prerequisites (Bridge) Program. The purpose of the Certificate Program in Developmental Disabilities is to provide upper-division undergraduate students from a variety of disciplines with knowledge regarding etiology, assessment, treatment, and policy issues related to individuals with developmental disabilities and their families. Students seeking certification must complete nine semester hours of coursework and three semester hours of practicum from an approved list of courses and practica. Courses are available in the following disciplines: art education; communication science and disorders; family and child sciences; middle and secondary education; music education/therapy; nursing; nutrition, food, and exercise sciences; physical education; psychology; and social work. The purpose of the 12-credit Bilingual Services Certificate is to offer a certificate focused on bilingual service delivery in speech-language pathology. This certificate is specifically designed to equip students with the foundational knowledge and skills needed to approach clinical practice with bilingual children from an evidence-based mindset. These skills include assessment, treatment plan development, intervention, and plan implementation. The courses are constructed to provide the skills necessary to consume, conduct, and produce research as well as provide clinical service delivery with a focus on bilingual learners in the K-12 setting. All courses focus on topics related to a) cultural responsiveness, b) bilingual assessment, and c) bilingual intervention. An additional certificate program, the Communication Science and Disorders Graduate Prerequisite Program was established to increase access to graduate training programs in Speech Language Pathology. Students with undergraduate degrees in other fields must complete coursework represented by this prerequisite program before beginning graduate study in speech-language pathology at Florida State University or many other programs throughout the nation. This program includes the prerequisite content in a series of six courses offered fully online, two courses each semester. Enrollment may occur at the start of any semester. For additional information, please refer to the "School of Communication Science and Disorders" chapter in this *Graduate Bulletin* or visit <http://commdisorders.cci.fsu.edu/>.

The School of Information administers graduate and undergraduate certificates in Health Information Technology. The twelve hours of coursework required for these certificates prepare students to be leaders in the Health IT field by strengthening skills in information management, technology integration and implementation, information organization, and information leadership. Students gain a detailed overview of health informatics, providing them with an entry point into the industry and with knowledge and skills that will help them integrate emerging technologies into practice. The courses provide a broad understanding of the industry, current issues and events, such as the "meaningful use" of electronic medical records systems, and eHealth approaches for health promotion and patient self-management. For more information, visit <https://ischool.cci.fsu.edu/>.

College of Social Sciences and Public Policy

The College of Social Sciences and Public Policy offers the Master of Public Health (MPH) degree. MPH degree graduates will be trained principally as health policy analysts. They will have a rich background in epidemiology, environmental health, health economics, health behavior, health administration, health policy and policy analysis, and statistical and qualitative

analytic skills. Careers are likely to include government agency or legislative staff positions, policy and consulting firms, healthcare organizations, advocacy organizations and lobbying firms, international organizations focused on health and population issues, and academic or media positions. For additional information, please refer to the “Public Health” chapter in this *Graduate Bulletin*, call (850) 644-4418, or visit <http://www.coss.fsu.edu/publichealth/>.

College of Nursing

The College of Nursing offers a Doctorate of Nursing Practice (DNP). Graduates are educated for a variety of advanced practice nursing roles, with an emphasis as a family practitioner. Students interact closely with faculty in one-on-one mentoring, seminars, and online classes. Clinical opportunities are designed to develop each student’s ability to make decisions, to practice creatively and imaginatively, and to cope with change in a climate of scholarship, discovery, and professional example. For additional information, please refer to the “Nursing” chapter in this *Graduate Bulletin*, e-mail info@nursing.fsu.edu, call (850) 644-3296, or visit <http://nursing.fsu.edu/programs>.

College of Human Sciences

The Department of Family and Child Sciences’ mission is optimizing human development and family well-being. The primary strategy used to achieve this mission is translational family science designed to compress the 17-year gap between scientific finding and implementation of that finding in everyday practice. Family and Child Sciences’ signature areas of graduate study within translational family science are: a) parenting and peer relationships for minimizing risky behaviors and optimizing child and adolescent development; b) interventions that build individual and family strengths in clinical and community contexts to prevent problems and promote quality of life; and c) methodological training to exploit the untapped potential of large existing data. A particular focus on those made vulnerable by social or legal marginalization. Our commitment to science, both in discovery and its application in practice, prepares graduate students to assume leadership roles in community-based organizations dedicated to protecting children from harm, that promote primary prevention through individual and family resilience, and public sector services to children and families. Doctoral students are eminently equipped to assume positions in higher education, research scientist positions in “think tanks” as well as state and federal government, and to direct program evaluations at local, state and national levels.

The Department of Nutrition, Food and Exercise Sciences’ mission is to contribute to the prevention and/or treatment of chronic diseases through basic and applied research and strong teaching programs that prepare the next generation of scholars and practitioners.

The Department of Nutrition, Food and Exercise Sciences trains graduate students to become well-grounded in science, to be able to rely on health and information technologies, to be equipped with critical thinking skills, to possess cross-functional knowledge and skills, and to be able to work in interdisciplinary environments. Programs are dedicated to training researchers and practitioners in techniques necessary for effective intervention for the prevention and/or treatment of chronic diseases. Florida State University was the first university to develop majors in nutrition and exercise physiology at both the undergraduate and graduate levels. Students are provided with in-depth study of nutrient metabolism, nutrition support in health and disease, health behavior, food science and technology, exercise physiology, and sports sciences. Students may pursue degrees at the master’s and doctoral levels with options in nutrition and food science and exercise physiology. Master’s students are trained as clinical exercise physiologists and as food scientists or technologists, and are also trained in: dietetics, sports nutrition, sports sciences, fitness, nutrition education, and health promotion. Doctoral graduates are prepared for academic and nonacademic positions. For more information, please refer to the “Department of Nutrition, Food and Exercise Sciences” chapter in this *Graduate Bulletin*, call (850) 644-4800 or (850) 644-1828, or visit <https://humansciences.fsu.edu/>.

College of Social Work

Based on values of service, social and economic justice, dignity and worth of the person, importance of human relationships, and integrity and competence in practice, the purposes of social work are to: 1) enhance human well-being and alleviate poverty, oppression, and other forms of social injustice; 2) enhance the social functioning and interactions of individuals, families, groups, organizations, and communities by involving them in accomplishing goals, developing resources, and preventing and alleviating distress; 3) formulate and implement social policies, services, and programs that meet basic human needs and support the development of human capacities; 4) pursue policies, services, and resources through advocacy and social or political actions

that promote social and economic justice; 5) develop and use evidence-based research, knowledge, and skills that advance social work practices; and 6) develop and apply practice in the context of diverse cultures.

The purpose of social work education is to prepare competent and effective social work professionals, to develop social work knowledge, and to provide leadership in the development of service delivery systems. Social work education is grounded in the profession’s history, purposes, and philosophy and is based on a body of knowledge, values, and skills. Social work education enables students to integrate the knowledge, values, and skills of the social work profession for competent, evidence-based practice.

The College of Social Work offers curricula leading to a Master in Social Work (MSW), with specializations in clinical practice and social work leadership, and a Doctor of Philosophy (PhD), along with several certification and Joint Graduate Pathways. For information, please refer to the “Social Work” chapter in this *Graduate Bulletin*, e-mail info@csw.fsu.edu, call (800) 378-9550 or (850) 644-4751, or visit <http://csw.fsu.edu>.

Graduate Department of HISTORY

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.history.fsu.edu/>

Chair: Gray; **Associate Chair (Graduate Studies):** Sinke; **Associate Chair (Undergraduate Studies):** Liebeskind; **Professors:** Blaufarb, Frank, Gellately, Grant, Gray, M. Jones, Stoltzfus; **Associate Professors:** Creswell, Culver, Dodds, Doel, Gabriel, Hanley, Herrera, Koslow, Liebeskind, McClive, Mooney, Piehler, Sinke, Upchurch, Williamson, Wood; **Assistant Professors:** Hicks, Özok-Gündoğan, Palmer, Renfro, Scholz; **Professors Emeriti:** Anderson, Betten, Bryant, Connor, Garretson, Halpern, Horward, J. Jones, Jumonville, Keuchel, Lo, Moore, Ripley, Rubanowice, Singh, Strait, Tannenbaum, Turner, Wynot

The Department of History offers a variety of programs at the Master of Arts (MA) and Doctor of Philosophy (PhD) levels that lead toward a range of careers within the profession. It boasts strong graduate programs in selected areas of American, European, African-American, Middle Eastern, Asian, and Latin American history. In addition to the traditional MA degree that requires mastery of a major and a minor field and completion of a thesis, the department provides an MA with a major in public history that prepares students for careers such as archivists and museum curators and lays the groundwork for historically-oriented careers in governmental agencies and the private sector. Two other masters programs, an MA teaching track and MS as terminal degree provide other options. Particularly gifted students may be eligible for the fast-track MA-PhD program.

The department also participates in interdisciplinary programs in women's studies, international affairs, Asian studies, and social sciences. Some of these interdisciplinary programs lead to an MA degree and others to the PhD. For information concerning these programs, refer to their appropriate entry in this *Graduate Bulletin*. At the doctoral level in history, students may earn the degree by demonstrating mastery of a major field and three minor fields and completing a dissertation.

Graduate students have access to the many collections at the Strozier Library. Because Strozier is a United States government repository, it houses abundant governmental documents available for graduate student use. In addition, The Florida State Archives, located within walking distance of the campus, includes private collections as well as state government documents. The Florida Supreme Court library and the Florida A&M University Black Archives are also located in Tallahassee and provide valuable resources.

Over the years, the department has been recognized for consistently high standards in both classroom teaching and published research. Faculty members have frequently won the annual University Teaching Award, with several members having won the award more than once. Members of this faculty have also received the Dr. Martin Luther King, Jr., Distinguished Scholar Award. Two members have been named Distinguished Teaching Professors, the highest distinction the University faculty bestows for teaching, and one has won the Florida Professor of the Year designation. Scholarly contributions by faculty are numerous and currently include over one hundred books, the development of the second largest collection of Napoleonic source materials in the country, and several major research projects, including the prestigious multi-volume *Black Abolitionist Papers Project*.

The **Institute on Napoleon and the French Revolution**, as part of the history department in the College of Arts and Sciences, was founded in 1990 by the Florida Board of Regents. Supported by the French Revolution and Napoleon Collection in the Strozier Library, which includes over 20,000 titles in the field, the Institute is the largest and most active of such programs in the United States. Over a dozen students from throughout the country are currently enrolled in the Institute and over 110 doctoral and master's students have graduated from the program. The Institute organizes international meetings, publishes appropriate volumes, holds symposia, and is one of the founding and active members of the Consortium on Revolutionary Europe.

Established by the FSU History Department in 1997, the **Institute on World War II and the Human Experience** is dedicated to preserving the history of this global conflict. With more than 6,500 collections, the Institute maintains one of the largest archives documenting the human dimension of World War II with a special emphasis on the role of American servicemen and service-women, as well as those serving on the home front. Housed in the Bellamy Building, the Institute serves as a resource to scholars, students, teachers, and the general public. The Institute sponsors an annual Fall and Spring lecture that brings to campus distinguished scholars. It also periodically organizes conferences, from topical specialties such as Comparative Home Fronts to an annual meeting of the Society for Military History (2017).

Admission Requirements

The Department of History offers programs leading to the degrees of MA and PhD in history. Eighteen semester hours of undergraduate work in history and/or graduate course work is a prerequisite for the MA degree programs and PhD programs in history. The student must have a minimum of a 3.3 GPA as an upper-division undergraduate (and a minimum 3.65 on a master's degree if applicable). Verbal scores in the 82nd percentile range or higher on the Graduate Record Exam (GRE) are typical among successful candidates, though such scores provide no guarantee of acceptance. An applicant may not submit GRE scores more than five years old. In addition to the University application (online at <http://admissions.fsu.edu>), three letters of recommendation, a statement of goals, and a writing sample are required. All materials must be received by December 1st to be considered for fall admission. Meeting the minimum requirements does not guarantee acceptance into the Department of History graduate program. Applicants should be in touch with potential advisors.

Master's Program in History

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

For the MA degree with thesis, the student will complete a minimum of thirty-three semester hours of graduate work, six of which must be in HIS 5971, Thesis. As part of the thirty-three hours, the student must take HIS 6059, Historical Methods. For details regarding major and minor field requirements, consult the department's graduate handbook.

In addition, the student must fulfill the language requirement (reading knowledge of one foreign language) and write an acceptable thesis.

Master's Program in History with a Major in Public History

Director: Jennifer Koslow, Associate Professor of History

The program in Historical Administration and Public History (HAPH) prepares students to enter historically-oriented careers in fields such as cultural resources management, historic preservation, museums, archives, and information and records management. Career paths can be found in the private sector, NGOs, and government agencies.

Program Overview

Students must complete a minimum of thirty-three semester hours of graduate work. At least twenty-four of these hours must be taken on a letter-grade basis. As part of the thirty-three hours, the student must take HIS 5067 (Public History Theory and Methods), HIS 6059 (Historical Methods), HIS 5082 (Archiving History), HIS 5083 (Preserving Historic Sites and Spaces), HIS 5165 (Digital History), HIS 6087 (Exhibiting History), at least one history seminar (HIS6934), and complete six internship credits. In addition, students must fulfill the language requirement and write an acceptable thesis or complete an acceptable capstone research project.

HAPH as a Minor Field

This program may be used as a minor field for the MA and PhD degrees in the following ways:

Minimum Requirement:

MA: Two HAPH courses: HIS 5067 and one of the following: HIS 5082, HIS 5083, HIS 5165, or HIS 6087.

PhD: HIS 5067 (Public History, Theory and Methods); six credits in internship; and one of the following: HIS 5082, HIS 5083, HIS 5077, HIS 5165, or HIS 6087.

Doctoral Program in History

The doctoral student chooses a major field and three minor fields in history, or a major field with two minor fields in history and an outside minor in an appropriate area, such as the humanities or the social sciences. The major field may be chosen from the following areas: United States to 1865; United States since 1865; or a topical United States major such as African-American history, intellectual history, or southern history. For European majors, students may select from Medieval Worlds, eighteenth-century Europe (to 1815), nineteenth-century Europe (1815–1914), twentieth-century Europe (1914 to the present), British history, and modern Russia. Other major and minor fields include Asia, the Atlantic world, Latin America, and the Middle East; or topical areas such as Gender and Sexuality, Science/Technology/Environment/Medicine, Legal History, Islamic World, Native Peoples of the Americas, and War and Society. Details in respect to these fields and available minor fields are set forth in the department's graduate handbook.

Doctoral students are required to take Teaching History at the College Level (HIS 6941) if they want to become Teaching Assistants at FSU. In addition, the major professor determines how many and for which foreign

languages the student must be certified proficient. The major professor may substitute or supplement language proficiency with certification in other approved research skills.

Definition of Prefixes

AMH—American History

ASH—Asian History

CLA—Classical and Ancient Studies

EUH—European History

HIS—General History and Historiography

LAH—Latin American History

WOH—World History

Graduate Courses

American History

AMH 5177. The Civil War Era (3). This course includes in-depth study of the twenty years from 1845 to 1865. Emphasis is placed on the coming of the Civil War, the secession crisis, and on both the military and nonmilitary events of the war years.

AMH 5239. The United States, 1920–1945: Prosperity, Depression, and World War II (3). This course covers the U.S. history from 1920 through 1945 and focuses on the political, economic, diplomatic, social, cultural, and intellectual developments during that period.

AMH 5336. U.S. Intellectual History I: Beginning to 1880 (3). This course is an interdisciplinary study of American thought from the Puritans to the late nineteenth century, asking, what mission America assigned itself, among other questions. Among the ideas examined are Puritanism, the Revolutionary ideology, federalism, the American Enlightenment, romanticism, individualism, and manifest destiny.

AMH 5404. The Old South (3). This course is a study of the social and economic development of the Southern states from settlement by Europeans to the end of the Civil War, with emphasis on the rise of the Cotton Kingdom and the causes of secession.

AMH 5426. The History of Florida (3). This course is an online course that explores the history of Florida from its pre-Columbian origins to the present.

AMH 5567. Women in 19th-Century America (3). This course examines the experiences of women in nineteenth-century America, focusing upon the ways gender, race, ethnicity, class, religion and region interacted to shape women's lives. Examines women's family, work, social, and political roles, as well as their contributions and quest for equality.

AMH 5576. Black America to 1877 (3). This course begins with the African background of black Americans and ends with the final curtailment of Reconstruction in 1877. Although some portions of the course are topical, cutting across chronological divisions, there will be a general chronological progression from colonial times to the end of Reconstruction.

AMH 5577. Black America Since 1877 (3). This course traces the social, economic, cultural, and political activities of African-Americans from Reconstruction through the Civil Rights Movement.

AMH 5636. North American Environmental History (3). This course introduces the changing relationships between human beings and the natural world in America through time.

AMH 5637. The Nature of Florida (3). This course is an online course that applies the methods and approaches of environmental history to Florida and the southeastern United States.

AMH 6379. Technology in America (3). This course examines a historical perspective on the role technology has played in United States history since the arrival of the first European settlers. Students examine the role of technologies and technological systems, how they affected society and culture, and how society and culture affected technological implementation and advancement.

Asian History

ASH 5266. Central Asia Since the Mongols (3). This course covers Central Asian history through the medieval and modern periods, with special emphasis on the political and ethnic histories of the Central Asian peoples.

Classical History

Note: The following courses are offered through the Department of Classics.

CLA 5438r. Studies in Greek History (3). This course is a study of selected topics in Greek history in the archaic, classical, or Hellenistic periods. May be repeated to a maximum of six semester hours.

CLA 5448r. Studies in Roman History (3). This course is a critical study of topics related to the Roman Republic or Empire. May be repeated to a maximum of six semester hours.

European History

EUH 5246. World War I: Europe, 1900–1918 (3). This course covers European history in the period 1900–1918 with a review of the domestic situation and foreign policy of the major continental powers with an analysis of the origins of the war, how and why the war was fought as it was, and the experience of the major powers on the home front.

EUH 5338. History of East Central Europe, 1815 to the Present (3). This course examines the social, political, economic, and cultural development of the lands traditionally known as Poland, Hungary, Czechoslovakia, and the Baltic States from the Congress of Vienna to the present. Wherever possible, attempts are made to present issues within a comparative framework.

EUH 5365. The Balkans Since 1700 (3). This course of Balkan history emphasizes the penetration of the Hapsburg and Russian empires, the decay of the Ottomans, and the emergence of the Balkan states after the wars of liberation, with stress on the cultural peculiarities of the various ethnic groups.

EUH 5458. Napoleonic Europe, 1795–1815 (3). This course traces the rise of Napoleon and his political, social, economic, and military impact on France and Europe, culminating in his defeat at Waterloo.

EUH 5578. 19th-Century Russia (3). This course is an examination of the history of Russia from 1801 to the beginning of the twentieth century, with emphasis on foreign relations and the development of the political and social conflicts that resulted in the revolutions of 1917.

EUH 5579. 20th-Century Russia (3). This course examines the social, economic, cultural, and international as well as political development of Russia from the final years of Tsarist rule through the Bolshevik Revolution to its emergence as one of the world's superpowers in the 1980s.

HIS 5265. War and Society in the Age of Revolution (3). This course offers an overview of the interaction between war, social change, and political transformation during the Age of Revolution (1750–1850) in the Atlantic World.

Historical Administration and Public History

HIS 5067. Public History Theory and Methods (3). This course offers an overview of the different specialties of public history, the historic preservation movement in the U.S., archives, history museums, oral history, commemoration, and the use of new media for public presentations of history.

HIS 5082. Managing Archives and Historical Records (3). This course covers the nature of archives; various types of records; arranging and processing archives; restoring and protecting records; archival institutions, policies, and procedures.

HIS 5083. Preserving Historic Sites and Spaces (3). This course covers the identification, preservation, and maintenance of historic sites; the historic preservation movement.

HIS 5085r. Internship in Historical Management (3–6). (S/U grade only). This course is a professional apprenticeship, usually with the Florida Division of Archives, History, and Records Management, designed to give students a practical introduction to the work of the historian in various fields. May be repeated to a maximum of six semester hours.

HIS 5089r. Historical Administration and Public History Program Capstone Research Project (1–6). (S/U grade only). MA in historical administration and public history candidates only. A minimum of six semester hours is required. May be repeated to a maximum of six semester hours.

HIS 5165. Digital History (3). This course examines the theory and practice of the ways in which history is collected, preserved, and interpreted using digital mediums.

HIS 6087. Exhibiting History (3). This course offers an overview of the history and development of museums, issues and theories in museum studies, and an introduction to the practical concerns of the professional museum field.

Latin American History

LAH 5475. History of the Caribbean (3). This course is a survey of the history of the Latin American Caribbean. Special attention is given to such topics as the Cuban Revolution and recent United States–Puerto Rican relations.

LAH 5749. Social Revolutionary Movements in Latin America (3). This course includes thematic coverage of the history of social revolutionary movements in Latin America, studying such revolutions as the Mexican, Cuban, and Bolivian examples. Special emphasis on the historiography of revolutions within and outside the area.

World History

WOH 5246. World War II (3). This course deals with World War II on a global basis, avoiding the common Eurocentric approach. Analyzes the character of the Pacific theater as well as that of the European War, presenting the student with insights into and contrasts between the various belligerents.

Others

HIS 5077. Oral History (3). This course exposes students to the use of oral history as a research technique and provides experience in conducting professionally acceptable oral history interviews.

HIS 5909r. Directed Individual Study (1–4). (S/U grade only). May be repeated to a maximum of twelve semester hours; however, only a maximum of four semester hours may apply to the master's degree.

HIS 5911r. Supervised Research (1–5). (S/U grade only). May be repeated to a maximum of five semester hours; however, only a maximum of three semester hours may apply to the master's degree.

HIS 5932r. Graduate Tutorial in History (1–2). Prerequisites: Graduate history majors and minors only, and instructor permission. Selected topics in history. A maximum enrollment of five students in each tutorial. May be repeated only once and to a maximum of four semester hours.

HIS 5935r. Special Topics in History (3). This course offers specialized approaches to history. Topics vary. May be repeated to a maximum of twelve semester hours as topics vary.

HIS 5940r. Supervised Teaching (1–5). (S/U grade only). May be repeated to a maximum of five semester hours.

HIS 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours of credit is required.

HIS 6059. Historical Methods (3). This course offers a survey of the basic skills essential to the study and practice of history. Emphasis is placed on developing writing techniques, organizing papers, research methods, and quantitative methodology.

HIS 6909r. Directed Individual Study (1–4). (S/U grade only). May be repeated to a maximum of twelve semester hours.

HIS 6934r. Special Topics in History (3). This course offers (usually in a seminar or colloquium format) highly concentrated courses of a topical nature or examines specific segments of national or regional histories not covered in graduate courses or in depth in the fields of European, American, Asian, or Latin American history. May be repeated for a maximum of sixty-four semester hours when topics and content changes.

HIS 6941. Teaching History at the College Level (3). This course is designed to familiarize history students with the practical aspects of classroom teaching and to provide some understanding of the philosophical and theoretical approaches to the teaching of history.

HIS 6980r. Dissertation (1–12). (S/U grade only). A minimum of twenty-four semester hours of credit is required.

HIS 8964r. Preliminary Doctoral Examination (0). (P/F grade only.) May be taken twice.

HIS 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

HIS 8976r. Master's Thesis Defense (0). (P/F grade only.)

HIS 8985r. Dissertation Defense (0). (P/F grade only.)

WST 5934r. Topics in Women's Studies (3). This course explores specific topics or themes in gender/women's studies based on a feminist approach. A variety of topics from different fields of study are offered from an interdisciplinary perspective. Topics of material not normally covered in the regular curriculum are offered. May be repeated to a maximum of nine semester hours.

HISTORY AND PHILOSOPHY OF EDUCATION:
see Educational Leadership and Policy Studies

HOUSING AND COMMUNITY DEVELOPMENT:
see Urban and Regional Planning

HUMAN NUTRITION:
see Nutrition, Food, and Exercise Sciences

HOUSING AND HOME DESIGN:
see Retail, Merchandising and Product Development

Graduate Program in HISTORY AND PHILOSOPHY OF SCIENCE

COLLEGE OF ARTS AND SCIENCES

Website: <http://hps.fsu.edu>

Director: Michael Ruse

Florida State University offers a program in the History and Philosophy of Science, leading to an undergraduate minor or a master's degree. The focus of the program is on the biological sciences, although we welcome applications from potential students interested in other areas of science. We take very seriously the importance of working on topics of relevance to the society in which we live, and we are strongly committed to an interdisciplinary approach, with involved faculty drawn broadly from across the university, especially the humanities and the natural sciences.

As a major university, we are able to offer opportunities for study and research in topics of particular pertinence to our region, such as racial issues, conservation and problems of pollution, and clashes between science and religion. We also have major strengths in other areas, including logic and formal methods, social philosophy, intellectual and cultural history, environmental history, history of the South, African American history, ancient science and mathematics, and evolution and ecology.

FSU has attractive competitive scholarships, and there are opportunities for research and teaching assistantships that include remission of tuition. Strong library facilities exist, and we are building further on these. We are committed to helping our students when they complete their degrees, either to further graduate work or to entering the work force. The master's degree, with its multidisciplinary breadth, is appropriate for those interested in pursuing a PhD in philosophy, history, religion, or biology. It is also suitable for those undergraduates who would like to combine it with one of the traditional disciplines in our combined bachelor's-master's program. In all cases, we will aim to tailor individual course programs to suit students' needs.

The Program hosts an annual conference or workshop, supported by the Werkmeister Fund. Those interested in learning more about the degree, or in enrolling, should consult our Web site and contact the office of the Director.

Degree Requirements

On entering the degree program, all students will be assigned an individualized committee of pertinent faculty to oversee their personal program. All students enrolled in the History and Philosophy of Science Program are required to take a minimum of twelve courses.

All students must engage in a significant piece of independent research. There are two options, and students will be expected to choose one after consultation with their personal committee. One option is to write an MA thesis (approximately seventy-five pages). A successfully completed thesis will count the equivalent of four courses. The second option is to write two research papers, with the intent to publish. There is no word limit (upper or lower), for this will depend on the topic and other factors (for instance, philosophy papers are generally shorter than history papers). A paper deemed satisfactory by the student's committee will count the equivalent of two courses.

The remaining courses will be chosen in consultation with the personal committee, and can be taken in either history or philosophy (or some combination thereof), or in one or more of the other associated departments (religion, classics, biology, psychology, etc.).

All courses must be passed with a grade of at least "B–", and students are expected to maintain a "B" average.

Required History Courses*

HIS 6469 Historiography and Science (3)

HIS 6500 History of Life Sciences (3)

Required Philosophy Courses*

PHI 6455 Philosophy of Biology: Basic Topics (3)

PHI 6457r Philosophy of Biology: Selected Topics (3)

Other Possible Courses*

AMH 5636 North American Environmental History (3)

EXP 5406 Neurobiology of Learning and Memory (3)

PHI 5934r Topics in Philosophy (3)

PHI 6406r Philosophy of Science (3)

PHI 6935r Seminar in Philosophical Topics (3)

Elective Courses*

- HIS 5932r** Graduate Tutorial in History (1–2)
AMH 5337 US Intellectual History II: 1880 to the Present (3)
PHI 5135 Modern Logic I (3)

***Note:** Course offerings vary based on the interests of the faculty; students are advised to contact the program for course offerings that are relevant and necessary for completion of their degree. For a complete listing of courses applicable and available on a semester-to-semester basis, please contact Shannon Tucker, Program Assistant, at (850) 644-9121 or visit <http://hps.fsu.edu>.

Definition of Prefixes

HPS—History and Philosophy of Science

Graduate Courses

HPS 5900r. Directed Individual Study (1–4). (S/U grade only). May be repeated to a maximum of four semester hours.

HPS 5970r. Thesis (1–4). (S/U grade only). May be repeated to a maximum of six semester hours.

**Graduate
Dedman School of
HOSPITALITY**

COLLEGE OF BUSINESS

**Master of Business Administration with a Major in
Hospitality and Tourism Management (MBA-HTM)**

The Master of Business Administration with a major in Hospitality and Tourism Management has been suspended effective Fall 2016 and will not be accepting any new students until further notice.

**HOUSING AND COMMUNITY DEVELOPMENT:
see Urban and Regional Planning**

**HUMAN SCIENCES, GENERAL COURSES:
see College of Human Sciences**

Graduate Program in Interdisciplinary HUMANITIES

COLLEGE OF ARTS AND SCIENCES

Website: <http://pih.fsu.edu/>

Program Director: Martin Kavka; **Graduate Advisor:** Allen Romano; **Undergraduate Advisor:** Kathryn Stoddard; **PIH Steering Committee:** Michael Carrasco (Art History), David Gants (English), Tarez Samra Graban (English), Will Hanley (History), Martin Kavka (PIH), Paul Marty (CCI), Judith Pascoe (English), Silvia Valisa (Modern Languages and Linguistics) The MA in Interdisciplinary Humanities is not accepting applications from prospective students seeking entry during the 2020-21 academic year.

A major in Digital Humanities, as part of the already existing MA in Interdisciplinary Humanities, allows students to create, curate, and analyze humanistic resources, answering those questions that humanists have long asked, questions about *what* artifacts and texts mean and questions about *how* those artifacts and texts function (or have functioned) for the communities that use (or used) them.

All graduate students are required to make an appointment with the graduate advisor to approve coursework for the following term.

Please refer to the department website at <http://pih.fsu.edu/> for additional information pertaining to graduate programs in Humanities.

Master's Program in Interdisciplinary Humanities

Please review all college-wide requirements summarized in the "College of Arts and Sciences" chapter in this *Graduate Bulletin*.

At the master's level, the Program in Interdisciplinary Humanities offers a thirty-three-semester hour non-thesis program with a major in Digital Humanities.

Admission

The following criteria must be met to be admitted to the master's program: 1) a bachelor's degree in any field; 2) a Graduate Record Examination (GRE) score averaging in the 50th percentile or better across all parts of the examination **and** a minimum grade point average of 3.0 or higher in all work attempted as an upper-division student working for a baccalaureate degree; and 3) three letters of recommendation.

Requirements

Students are required to complete coursework in three areas:

1. A core of twelve hours: HUM 5835, HUM 5837, HUM 5838, and a digital project which each student pursues in his or her area of interest.
2. At least twelve hours of courses that build skills in Digital Humanities. Such courses may be humanities courses with a particular focus in digital humanities or courses which have as their subject specific skill sets relevant to work in digital humanities. These include courses in a variety of departments and schools within the University (for example: Art, Communication, Computing, English, Geography, History, Museum Studies). A list of suggested courses in this area is maintained online. Students will choose these courses in consultation with the graduate advisor.
3. Up to nine hours in graduate courses offered by humanities departments but not focusing explicitly on digital methods and approaches.
4. Students are expected to take part in the Digital Scholars Reading Group, when offered, by registering for ENG 5998r (Tutorial in English) on an S/U basis.

For a full description of Digital Humanities MA major and its requirements, contact the graduate advisor, Allen Romano, at aromano@fsu.edu.

Definition of Prefixes

HUM—Humanities

Graduate Courses

HUM 5835. Introduction to Digital Humanities I (3). This course introduces students to the history, theory, and methodological practices of Digital Humanities. The course is open to graduate students from any discipline; for MA students in Digital Humanities in PIH the course should be taken concurrently with intro to Digital Humanities II.

HUM 5837. Introduction to Digital Humanities II (3). This course is a hands-on workshop wherein students put into practice skills and techniques current in Digital Humanities. For Digital Humanities MA majors, it is designed to be taken concurrently with HUM 5835.

HUM 5838. Digital Pedagogy (3). This course provides students with the intellectual background and practical experience needed to make informed and reflective judgments about how, when, and why to use (or not use) digital technology in teaching. It serves both as the required pedagogy course for the Humanities MA program in Digital Humanities and as a seminar in digital pedagogy.

HUM 5909r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

HUM 5915r. Supervised Research (1–5). (S/U grade only). A maximum of three semester hours may be applied to a master's degree. May be repeated to a maximum of five semester hours.

HUM 5938r. Interdisciplinary Topics (3). This course provides students from any discipline with an integrated interdisciplinary learning experience. The course is taught by instructors from at least two different departments and/or colleges. Topics vary. May be repeated to a maximum of eighteen semester hours.

HUM 5940r. Supervised Teaching (0–5). (S/U grade only). A maximum of three semester hours may be applied to a master's degree. May be repeated to a maximum of five semester hours.

HUM 6904r. Readings for Examination (1–12). (S/U grade only). Designated for graduate students who have completed, or have virtually completed, all of their required coursework and are preparing for their master's comprehensive examinations or their preliminary doctoral examinations. May be repeated to a maximum of twelve semester hours.

HUM 6939r. Seminar Topics (3). May be repeated to a maximum of fifteen semester hours.

HUM 6980r. Dissertation (1–12). (S/U grade only).

HUM 8985r. Dissertation Defense (0). (P/F grade only.)

INDUSTRIAL/APPLIED PSYCHOLOGY: see Psychology

Graduate Department of INDUSTRIAL AND MANUFACTURING ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Website: <http://www.eng.famu.fsu.edu/ime/>

Chair: Okoli; **Professors:** Awoniyi, Liang, Okoli, Zhang; **Associate Professors:** Dickens, C. Park, Vanli, Zeng; **Assistant Professors:** Li, Sun, Sweat, Wang, Yu; **Research Faculty:** Hao, J.G. Park; **Teaching Faculty:** Devine, Georgiadis, Gray, Taylor; **Adjunct Instructor:** Gomez; **Professor Emeritus:** Braswell

The Department of Industrial and Manufacturing Engineering offers three graduate degree programs: the Master of Science (MS) and Doctor of Philosophy (PhD) in Industrial Engineering and the Master of Science (MS) in Systems Engineering.

Industrial Engineering is a broad discipline that encompasses education and basic/applied research concerning the design, improvement, and installation of integrated systems of people, material, information, equipment, and energy. Graduate instruction and research are broadly grouped into three categories: manufacturing engineering, quality engineering, and industrial systems. Current research interests include manufacturing processes and systems; statistical; quality control; failure and life cycle analysis; mathematical optimization of complex production systems; condition monitoring; reliability engineering; statistical machine learning; distributed sensor networks; manufacturing process monitoring and diagnosis; set-covering theory; simulation environments; polymeric materials; nanomaterials processing and applications; additive thin-film manufacturing; printed electronics; carbon nanotube based functional materials; advanced composites and multi-scale materials; simulation for material processing; composite material processing.

Systems engineering (SE) is an interdisciplinary field of engineering that focuses on how to design and manage complex engineering systems over their life cycles. SE studies systems, processes, and practices required to develop them. These engineers are dedicated to ensuring all stakeholder needs are met in the best, most efficient way possible. SE facilitates deep integration of technical systems and helps ensure the systems developed are coherent, effective, and sustainable solutions to fulfill the system needs. SE professionals work with all facets of a system, from hardware to facilities, personnel to procedures. Our systems engineering program integrates engineering disciplines with industrial and management practices. Through the program, students will develop skills required in the national workforce for growing areas in the technology-driven global economy.

Research Facilities

The Department of Industrial and Manufacturing Engineering provides an excellent environment for instruction and research. The department has the following laboratories housed in the College of Engineering: Materials and Product Property Characterization, Computer Integrated Manufacturing, Precision Manufacturing, and Quality Engineering. In addition, the students have access to the 44,000 square foot state-of-the-art labs at Florida State University's High-Performance Materials Institute (see <http://hpmi.research.fsu.edu/>), which houses the following laboratories: Mechanical Testing Lab, Chemical and Thermal Analysis, Additive Manufacturing Lab, Manufacturing Lab, and Characterization Lab.

Each laboratory in the Department is equipped with state-of-the-art research and instructional equipment. Some of the available equipment in the labs are: 3D printers, Laser Scanner (Additive Manufacturing Lab); MTS Insight Testing System, MTS Landmark Servohydraulic System (Mechanical Testing Lab); Differential Scanning Calorimeter, Thermomechanical Analyzer (Chemical and Thermal Analysis); Scanning Electron Microscope, FTIR, UV-Vis, and Raman Spectroscopes, X-ray Differentiation and Scattering Machine, Atomic Force Microscope, Electromechanical and Electrochemical Testing Station (Materials and Product Property Characterization Lab); Twin Screw Extruder, Autoclave, Laser Cutting Machine, High-Power Sonicator, Temperature-Humidity Test Chamber (Manufacturing Lab).

Students have access to computer facilities, which includes both IBM-compatible PCs and high performance engineering workstations. The Department offers access to a wide variety of software for CAD/CAM optimization, simulation, and statistical analysis, including Matlab, Minitab, Design Expert, R, Arena, and Simio computing environments. The Department also has access to the full Siemens PLM software suite for digital manufacturing, life cycle management, manufacturing operation management, and integrated solution for computer-aided design, manufacturing, and engineering. The statistical and simulation software and computing facilities are located in the Quality Engineering Lab. The solid modeling and CAD/CAM software are located in the Computer Integrated Manufacturing Lab. Technical support for software and hardware maintenance are provided by the Department and the

College. In addition, the students have access to the Florida State University High Performance Computing (HPC) Cluster for intensive distributed-memory parallel computations.

Master of Science (MS)

The department offers a variety of Master of Science in Industrial Engineering (MSIE) program options to accommodate students' needs and specializations. Students may pursue a traditional MS or an MS with specialization in engineering management. The traditional MS program is research based, requiring the students to write and defend a thesis in their chosen area. However, the Master of Science with specialization in engineering management (MSIE-EM) does not require a thesis. The department also offers a BS-MS combined pathway, which provides students with a unique opportunity to complete graduate education on an accelerated schedule. Additionally, the department offers an MS in Systems Engineering (MSSE), a course-based, non-thesis degree designed for both full-time students and full-time working professionals. *The Industrial Engineering Graduate Handbook*, which is available from the department, provides a complete description of all programs and requirements.

Admissions

Candidates for admission to graduate study in industrial engineering must meet university and departmental criteria. In some cases, students may be admitted on a provisional basis pending successful completion of prerequisite work. In all matters concerning admission, decisions made by the departmental graduate committee are final. Students who do not have a bachelor's degree in industrial engineering are required to complete the following prerequisite courses before undertaking graduate study:

- EGN 3443 Statistical Topics in Industrial Engineering (3)
- MAC 2313 Calculus with Analytic Geometry III (5) **OR** MAS 3105 Applied Linear Algebra (4) **OR** equivalent course as determined by the graduate committee.
- ESI 3312C Operations Research I: Deterministic (3) **OR** ESI 4313 Operations Research II: Nondeterministic (3) **OR** equivalent course as determined by the graduate committee
- a class in FORTRAN, PASCAL, or C (required as evidence of proficiency in programming).

Admission Requirements for Traditional MSIE

- A BS in industrial engineering (or a related field) from an accredited college or university, with a GPA of at least 3.0 in all work attempted while registered as an upper-division undergraduate student working toward a baccalaureate degree
- Minimum scores of at least 155 on the quantitative portion and 146 on the verbal portion of the GRE
- A minimum score of 80 (iBT) on the TOEFL or a minimum of 6.5 on the IELTS (international students only)
- Three letters of recommendation, addressed to the Director of Graduate Studies, assessing the applicant's potential to do graduate work
- A statement of professional goals

Admission Requirements for MSIE with Specialization in Engineering Management

Requirements for admission to this program are identical to the MSIE admission requirements, except that, (1) GRE minimum score requirements are 151 in quantitative and 146 in verbal, and (2) applicants' BS degree can be in engineering, computer science, mathematics, physics, or a related area as determined by the Director of Graduate Studies.

The department also offers a BS-MS combined pathway toward MSIE-EM. Well-qualified students, who are expected to have a GPA of 3.3 or better in the undergraduate studies, are eligible to apply for the combined BS-MS pathway during the spring semester of their third year in the College. Qualified undergraduate students interested in the program should meet with the undergraduate academic advisor and the department graduate program director in the spring semester of their third year to determine whether they are eligible to apply and to plan their study in the senior year. Application to the undergraduate portion of the program will be reviewed by the department graduate committee and admission will be decided by the graduate program director with recommendation from the graduate committee and undergraduate academic advisor. Once admitted, students can proceed with taking 3 graduate level industrial engineering courses in their senior year to replace 8 credit hours in the existing undergraduate program. Admitted students should carry a course load of no more than fifteen (15) semester hours, and need to receive the approval of the dean, the department chair, and the undergraduate advisor

prior to registration. Students will register the course at the graduate level and be graded as graduate students. Student will have the option to graduate with BS degree with the three graduate level courses.

For admission to the graduate portion of the program the students must make a formal graduate application in their senior year. Students who are interested in enrolling in the graduate program should meet with the director of graduate studies in the senior year to determine admission requirements and whether they are eligible to apply. Application, evaluation, and admission will follow the standard IME department requirements for MS in Engineering Management.

Admission Requirements for MS Systems Engineering

Requirements for admission to this program are identical to the MSIE admission requirements, except that, (1) GRE minimum score requirements are 151 in quantitative and 146 in verbal and (2) applicants' BS degree can be in engineering, computer science, mathematics, physics, or a related area as determined by the Director of Graduate Studies.

Degree Requirements

Thesis Option

Each MSIE student who intends to complete a thesis is required to take a minimum of thirty semester hours (twenty-four semester hours of course work and six semester hours of thesis). At least eighteen semester hours of the course work hours must be taken in the Industrial and Manufacturing Engineering Department. Students must maintain an overall GPA of 3.0 or above in order to graduate.

When filing a degree plan, students must specify one of the department's areas of concentration as their major: manufacturing systems and engineering or quality engineering and industrial systems. If the desired area of concentration differs from the initial area assigned (based on the student's graduate application), a petition to the Director of Graduate Studies must be submitted requesting the change.

There are three sets of courses under the traditional MSIE program: core courses, specialization industrial engineering courses, and electives:

Core Courses. Every student choosing the thesis option must take the following courses and receive a grade of "B" or better in each: ESI 5408, Applied Optimization; ESI 5247, Engineering Experiments; ESI 5525, Modeling and Analysis of Manufacturing and Industrial Systems; and EIN 5936, Graduate Seminar.

Specialization Courses. These courses are used in defining minimum requirements for each specialization area. Each student is required to take at least three from those courses listed in his or her chosen area of specialization. Substitutions may be made with the approval of the student's advisory committee and the Director of Graduate Studies. Please refer to the departmental Web site at <http://www.eng.famu.fsu.edu/ime/>.

Electives. Elective courses provide program variation for students. An industrial engineering graduate course may be selected as an elective course. With the consent of the advisory committee, the student may take courses from other engineering departments or other academic schools or colleges at the two universities.

Non-Thesis Option

Under exceptional circumstances, students may be allowed into the MSIE non-thesis option. In such cases, students are required to complete a minimum of thirty-three semester hours of course work at the graduate level, at least twenty-four of which must be taken in the Department of Industrial Engineering. Each student must obtain an overall GPA of 3.0 or above in order to graduate. Students should contact the department to learn more about specific course requirements for this program.

Specialization in Engineering Management

Students are expected to complete thirty semester hours of course work and will not complete a thesis. Industrial Engineering Core courses constitute eighteen credit hours, Management core courses constitute three credit hours, and the elective courses constitute nine credit hours. At least three credit hours of the electives must be taken at the College of Engineering. Students must maintain a minimum GPA of 3.0 at all times while enrolled in the program in order to graduate. Students should contact the department to learn more about specific course requirements for this program.

Combined Pathway

All BS-MS students must take the following distribution of courses for a total of thirty (30) credit hours to receive the combined BS-MS degree. Nine (9) of the thirty (30) credit hours must be taken during the senior year of the student's BS degree program as the shared credits. The remaining twenty-one

(21) credit hours are taken as part of the MS degree program. Students have the option to graduate with only the BS degree at the completion of the nine (9) credit hours of the graduate courses.

MS Systems Engineering

Students are expected to complete thirty semester hours of course work. The program requires seven core courses and three technical electives. Students must maintain a minimum GPA of 3.0 at all times while enrolled in the program in order to graduate. Students should contact the department to learn more about specific course requirements for this program.

Doctor of Philosophy (PhD)

The PhD in industrial engineering is designed for students and professionals who wish to pursue academic careers or to achieve advanced standing in the field. The general requirement is a minimum of forty-five semester hours of work beyond the baccalaureate degree, excluding any credits earned for a master's degree thesis, or a minimum of thirty-three semester hours beyond the master's degree.

Typically, twelve of the forty-five semester hours will have been satisfied by a student who has earned a master's degree in industrial engineering, or a closely related field. Of the remaining required hours, nine must be letter-graded course work combined with a minimum of twenty-four additional hours of dissertation research. The course work beyond the master's consists of: 1) eighteen semester hours of breadth-requirement core courses and 2) up to six or more semester hours of depth-requirement courses, as determined by the student's doctoral supervisory committee. Residency and time-for-completion requirements are determined by the student's university of enrollment. Students must maintain a minimum GPA of 3.4 at all times while enrolled in the program. Doctoral candidates must meet the department publication requirements before the *viva voce* of their dissertation.

Admissions

Note: The following standards also pertain to students who wish to pursue a PhD but have not yet obtained their master's degree.

Applicants must meet the following minimum requirements:

1. Have a baccalaureate or master's degree in industrial engineering (or related field) from an accredited college or university, with a grade point average (GPA) of at least 3.0 on a 4.0 scale, and at least 3.4 GPA on master's degree work
2. Have a minimum score of 155 on the Quantitative portion and 150 on the Verbal portion of the GRE
3. Have a minimum score of 80 on the TOEFL iBT (580 paper based) or a minimum of 6.5 on the IELTS (international students only)
4. Three letters of recommendation, addressed to the Director of Graduate Studies, assessing the applicant's potential to do graduate work
5. A statement of professional goals

Core Courses for PhD Students

All PhD students are required to take the following courses as soon as possible after their admission to the PhD program. These courses provide students with a common, solid background in mathematics, statistics, and industrial engineering.

During the first calendar year of the PhD program, students must select a single course from each of the Mathematics and Computational course groups and must earn a grade of "B" or higher. Students who do not satisfy this requirement may be dismissed from the program.

Mathematics Course Group

- MAA 5306 Advanced Calculus I (3)
- MAP 5345 Elementary Partial Differential Equations I (3)
- STA 5323 Introduction to Mathematical Statistics (3)

Computational Course Group

- EIN 5930r Specialized Topics in Industrial Engineering (1-6)
- MAD 5403 Foundations of Computational Methods I (3)
- MAP 5395 Finite Element Methods (3)

OR

- EIN 5930 Special Topics in Industrial Engineering (1-6)

Note: The required topic is "Finite Elements Methods" for three (3) credit hours.

- STA 5106 Computational Methods in Statistics I (3)

IE Core Course Group

The following courses are required if the student did not take them to fulfill requirements for the master's degree: ESI 5247 Engineering Experiments; ESI 5408 Applied Optimization; ESI 5525 Modeling and Analysis of Manufacturing and Industrial Systems; EIN 5020 Research Methodology; and EIN 5936 Graduate Seminar.

Core courses cannot be taken on a pass/fail (S/U) basis.

Preliminary Examination

Following completion of a major portion of the coursework as defined in the degree plan, and upon certification of the doctoral supervisory committee that the student has 1) maintained a minimum 3.4 GPA and 2) progressed sufficiently in the study of industrial engineering and its research tools to begin independent research in the area of the proposed dissertation, the student is ready to take the preliminary examination.

The purpose of the preliminary examination is to test the adequacy of a student's background related to the student's area of concentration and to determine if the student is adequately prepared to formulate and undertake acceptable dissertation research. The procedures are available from the department.

Proposal and Dissertation

After completion of the preliminary examination, the student is admitted to formal candidacy for the PhD. After a period of preliminary research as determined by the doctoral committee, a research proposal must be successfully presented to the committee by the doctoral candidate.

The research proposal is a description of the research which the student intends to undertake, which will be reported in a detailed, comprehensive fashion in the completed dissertation. The research proposal must be submitted to the supervisory committee after the student passes the preliminary exam (usually one year after the preliminary exam) and before beginning dissertation research. The student must also provide an oral presentation to the committee at least one week after submitting the proposal. The proposal offers the student an opportunity to convince the supervisory committee of the appropriateness of the research topic, as well as of his/her capability to pursue the projected topic to a successful conclusion.

Subject to approval of the doctoral candidate's committee confirming the candidate's readiness to defend his/her dissertation, and upon meeting the department publication requirements, the candidate may proceed to defend their dissertation research. A doctoral dissertation then must be completed on a topic approved by the candidate's doctoral supervisory committee. To be acceptable, it must be an achievement in original research constituting a significant contribution to knowledge and representing substantial scholarly effort on the part of the student. The doctoral supervisory committee, department chairperson, and such other members of the faculty as appointed by the academic dean or specified by university regulations will conduct the examination. Publication of the dissertation shall conform to the regulations of the university in which the student is registered.

During the dissertation defense, all committee members and the student must be physically present. In cases where this is not possible, the department allows no more than one member to participate in the defense in real time via distance technology. The distance technology must allow two-way audio and visual links.

Definition of Prefixes

EEL—Engineering: Electrical

EIN—Industrial Engineering

EMA—Materials Engineering

EOC—Ocean Engineering

ESI—Industrial/Systems Engineering

PRO—Prosthetics/Orthotics

Graduate Courses

EEL 5606. Introduction to Mobile Robotics and Unmanned Systems (3). This course provides a thorough technical overview of autonomous vehicles for engineering students interested in understanding the basics of unmanned systems. The principles and methodology involved for the systems development is discussed. The course uses practical examples of developing autonomous unmanned vehicle systems.

EEL 5688. Principles of Autonomous Systems (3). Prerequisite: EEL 5605. This course provides an in-depth review of the principles of autonomy by reviewing probability theory and covering topics in pattern recognition, computer vision/perception, localization/SLAM, planning, and unsupervised/supervised learning.

EIN 5020. Research Methodology (3). This course provides a structured and easily understandable step-by-step approach for students to learn the key components that comprise a sound research process.

EIN 5182. Engineering Management (3). Prerequisite: EIN 5353. Course in modeling existing and future organizations, with emphasis on organizations for the 21st century. Special consideration is given to flat matrix models.

EIN 5328. Environmentally Conscious Design and Manufacturing (3). Prerequisite: Graduate standing. This course offers a review of basic concepts and fundamentals of environmentally conscious design and manufacturing. The topics include ecology and environment; review of environmental laws and regulations pertaining to design and manufacturing; the global picture of environmental concerns; integration of environmentally conscious design and manufacturing within a company; and life-cycle analysis for product and process design.

EIN 5353. Engineering Economic Analysis (3). Prerequisites: EGN 3443 and MAP 3305. This course includes feasibility science, mathematics and engineering focused on the engineering economic analysis of design and system alternatives for high technology operations.

EIN 5356C. Cost Estimating for Engineering Economic Analysis (3). Prerequisite: EGN 3613. The course provides students with an improved understanding and application of engineering economics and cost analysis which are critical in a Systems Engineer's toolkit. The course includes cost aspects of systems engineering, exploring cost from a decision-making perspective.

EIN 5392. Manufacturing Processes and Systems (3). Prerequisite: EGN 4000. Material forming, material removal and material joining processes. Shop floor layout topics. Material flow topics. Information system topics. System integration topics. Manufacturing system evaluation topics. Case studies and design exercises.

EIN 5398. Manufacturing Materials Processing (3). Prerequisite: EIN 5392. Review of basic concepts and fundamental results of materials science. Fundamentals of casting processes and applications. Nontraditional methods in materials processing. Microscale material processing, with applications to microelectronics and similar structures. Industrial byproduct processing. Automation issues. Case studies and design exercises.

EIN 5445C. Technology Entrepreneurship and Commercialization (3). This course simulates, in an academic environment, the process of creating and analyzing business models and commercialization plans for technology-based products or services.

EIN 5524. System Modeling and Simulation (3). Prerequisites: CGS 3460, EGN 3443, and ESI 3443. Discrete event, continuous, and process simulation. Combined discrete/continuous simulation. Manufacturing systems modeling. Event graphs. Simulation languages and systems. Experimentation with models. Introduction to simulation-specific statistical problems. Model validation and verification issues. Design exercises.

EIN 5622. Computer-Aided Manufacturing (3). Prerequisite: EIN 3390C. CAD/CAM. Numerical Control (NC) and Computer Numerical Control (CNC). Programmable automation. Computer-aided process planning.

EIN 5905r. Directed Individual Study (1-3). (S/U grade only). Prerequisite: Instructor permission. May be repeated to a maximum of six semester hours.

EIN 5930r. Special Topics in Industrial Engineering (3-6). Prerequisite: Instructor permission. This course discusses topics in industrial engineering with particular emphasis on recent developments. May be repeated to a maximum of six semester hours.

EIN 5931. Leadership and Communications (3). Prerequisites: Graduate standing and EGN 3613. Course topics include leadership theories, motivation, goal setting, planning, proposal writing and technical presentations. Presentations given by business leaders are planned.

EIN 5936r. Graduate Seminar (0). (S/U grade only). Research presentations by faculty, students, and guests from industry.

EIN 6901r. Master's Thesis (1-12). (S/U grade only). Prerequisite: Approval by department. This course provides a means of registering for thesis research work and recording progress towards its completion. May be repeated to a maximum of forty-five (45) credit hours; repeatable within the same term.

EIN 8976r. Master's Thesis Defense (0). (P/F grade only.)

EMA 5015C. Nanomaterials and Nanotechnology (3). This course is designed to provide students the basic understanding and up-to-date knowledge on nanostructured materials, characterization methods, nano-devices, and nano-fabrication through class lectures, literature reading, and hands-on lab experiments.

EMA 5182. Composite Materials Engineering (3). Prerequisite: Instructor permission. Course provides basic understanding of composite materials. Topics include introduction to composite materials, properties and forms of constituent materials, consideration of composite behavior and failure modes, characterization of material performance and testing, introduction to available manufacturing techniques, laboratory demonstrations, and case studies.

EOC 5518. Marine Vehicles Engineering Principles (3). This course provides a thorough technical overview of naval architecture of advanced marine vehicles. As an introduction to naval architecture and marine vehicles, this course provides the practicing systems engineer the basic knowledge and skills necessary to lead a team of engineers with marine vehicles as part of the mission and project.

EOC 5519. Marine Systems Engineering Principles (3). In this course, students apply strategic and critical thinking principles to the development of marine systems, and develop a comprehensive approach to the integration of hull, propulsion, and mission systems into marine vehicle design.

ESI 5000. Design Considerations for Systems Engineering (3). This course provides students with knowledge and practical experience in quality and reliability measures for systems engineering. The course covers principles of Failure Mode and Effects Analysis (FMEA), reliability specifications, design for reliability, human centered design, accelerated testing, mechanical stress and analysis, software reliability, cyber-security, supplier reliability, mathematical and statistical models for process control, life distributions and concepts, design for quality, focus on customers, six sigma, total quality, and the importance of quality in design.

ESI 5001. Systems Test and Evaluation (3). This course provides students with knowledge and practical experience in system test and evaluation (T&E) as practicing systems engineers. The course discusses how tests are defined, designed, conducted, and how data from the tests are evaluated against the system requirements. Test and evaluation techniques of system design and performance are analyzed throughout the course. Feedback loop of data analysis is introduced to identify the need for design changes in order to improve safety, correct failures, verify supportability of the systems, and support investment decisions.

ESI 5223. Statistical Process Control (3). Prerequisite: ESI 4234. Advanced methods of statistical process control for univariate and multivariate processes, methods for change point detection and estimation, control chart performance comparisons, process capability studies.

ESI 5228. Introduction to ISO 9000 (3). Prerequisite: Instructor permission. Introduction to the ISO 9000 quality system standards. Quality auditing. Audit report writing. Documenting the requirements. Case studies and demonstrations.

ESI 5243. Engineering Data Analysis (3). Prerequisite: EGN 3443 or equivalent. Analysis of experimental and observational data from engineering systems. Course focuses on empirical model building using observational data for characterization, estimation, inference and prediction.

ESI 5247. Engineering Experiments (3). Prerequisites: EGN 3443 and ESI 5243. This course provides an introduction to designing experiments and analyzing the results. It is intended for engineers and scientists who perform experiments or serve as advisors to experimentation in industrial settings. Students must have an understanding of basic statistical concepts. A statistical approach to designing and analyzing experiments is provided as a means to efficiently study and comprehend the underlying process being evaluated. Insight is gained that leads to improved performance and quality.

ESI 5249. Response Surfaces and Process Optimization (3). Prerequisite: ESI 5247. This course explores combined statistical experiment designs, empirical model building, and optimization methods. Topics include restrictions on randomization, mixture experiments, and robust design. Emphasis is placed on software tools to build designs and perform appropriate analyses.

ESI 5353. Engineering Risk Analysis and Decision Making with Uncertainty (3). This course provides students with the knowledge and practical experience in risk analysis, risk identification, risk mitigation strategy development, ethics in risk management, communicating uncertainties, and risk leadership in complex organizations. Stochastic modeling and probabilistic theoretical models are exercised, and students are expected to understand probability basics.

ESI 5408. Applied Optimization (3). Prerequisite: ESI 3312C. Optimization topics relevant to industrial operations and systems. Emphasis on basic modeling assumptions and procedure implementation. Topics shall include linear programming, nonlinear programming, discrete optimization and large-scale optimization software. Design exercises.

ESI 5451. Project Analysis and Design (3). Prerequisites: EGN 3613 and ESI 3312C. Project analysis and evaluation, utilizing networks and graph theory, advanced engineering economy, simulation procedures and other evaluation software. Project implementation topics, including resource shortfalls and expediting. Case studies and design exercises.

ESI 5458. Optimization on Networks (3). Prerequisite: ESI 3312C. Review of basic combinatorics. Basic concepts of graph theory. Matching and covering, and applications. Traversability and path problems on networks and applications. Tree problems. Network flows and applications. Eulerian paths, Hamiltonian paths, and applications. Location problems on networks. Design exercises.

ESI 5510. Fundamentals of Systems Engineering (3). This course provides students with a fundamental understanding of Systems Engineering (SE). The course introduces multidisciplinary SE technical processes over the life cycle of a system including growing a deep awareness and understanding of analyzing and documenting user needs.

ESI 5512. System Requirements Analysis and Knowledge Management (3). The course provides students with the knowledge and practical experience in system requirement development and analysis as practicing systems engineers. The course introduces key knowledge management principles and practices along with a thorough understanding of methods to codify intellectual property and tacit knowledge into explicit knowledge for the betterment of the organization and the system people, processes, and products supported.

ESI 5524. Advanced Simulation Applications (3). Prerequisite: ESI 4523 or EIN 5524. Application of simulation to complex systems, including material handling systems, real time scheduling, high speed/high volume production, modern manufacturing techniques, health-care delivery and logistics. Concurrent use of simulation and other analysis techniques. Use of experimental design, output analysis and validation techniques. Case studies.

ESI 5525. Modeling and Analysis of Manufacturing and Industrial Systems (3). Prerequisites: EIN 4333, ESI 3312C, ESI 4523, ESI 5408, and ESI 5524. Modeling and analysis of material flow systems, flow-shop and job-shop scheduling, material handling system analysis, mathematical and simulation modeling for general manufacturing and industrial systems.

ESI 5536. Model Based Systems Engineering and Simulation (3). This course provides students with knowledge and practical experience in Model Based Systems Engineering (MBSE) and simulation. The International Council on Systems Engineering (INCOSE) defines MBSE as the formalized application of modeling to support system requirements, design, analysis, verification and validation activities beginning in the conceptual design phase and continuing throughout development and later life cycle phases. The course introduces de facto industry standard MBSE modeling software and tools, and their use in the design and optimization of systems.

PRO 5132. Advanced Materials in Prosthetics and Orthotics (3). Prerequisite: EMA 5182. This course focuses on design and manufacturing issues pertaining to the cost effective production of prosthetic devices using advanced composite materials. The course considers service elements as comfort, aesthetics, customization, durability, ease of use, costs, and service life, and their manufacturability with a materials engineering perspective. The course strongly emphasizes the hands-on experience and is class and lab based. The lab component of this class is denoted as PRO 5132L-Advanced Materials in Prosthetics and Orthotics Lab (2).

PRO 5132L. Advanced Materials in Prosthetics and Orthotics Lab (2). This course provides students with a basic knowledge of the prescription and fabrication of various prosthetic and orthotic devices using specified medical composite materials. The prerequisite of the lab is PRO 5132-Advanced Materials in Prosthetics and Orthotics. The lab is designed to encourage students to apply the principles of practical material science to biomechanics, case study, and actual clinical practice.

PRO 5803. Orthotics and Prosthetics Clinical Rotation (3). This course combines traditional classroom meetings on-site with clinical rotation hours off-site, in which students observe, assist, and practice patient care and device fabrication in an environment that prepares them for an orthotic or prosthetic residency. Students study traditional and emerging topics related to the O&P field and are then placed at a clinical agency to practice skills under close supervision of an American Board Certified (ABC) prosthetist/orthotist.

Doctoral

EIN 6980r. Dissertation (1-12). (S/U grade only.) Prerequisite: Admission to doctoral candidacy. This is a mandatory class for all PhD seeking students. May be repeated to a maximum of forty-eight (48) semester hours within the same term.

EIN 8964. Preliminary Doctoral Examination (0). (P/F grade only.) Prerequisite: Doctoral candidate standing.

EIN 8985r. Dissertation Defense (0). (P/F grade only.) Prerequisite: Doctoral candidate standing.

School of INFORMATION Graduate Programs

COLLEGE OF COMMUNICATION AND INFORMATION

Website: <http://ischool.cci.fsu.edu/>

Director: Kathleen Burnett; **Professors:** G. Burnett, K. Burnett, Everhart, Gross, Kazmer, Latham, Lustria, Mardis, Marty, McClure, Stvilia; **Associate Professors:** He, C. Hinnant, Ho, Mon; **Assistant Professors:** L. Hinnant, Oliveira, Rankin; **Specialized Faculty:** Baeg, Barrager, Chatmon, Gibradze, Jowett, Marks, Saludo, Swaine, von Hollen; **Professors Emeriti:** Aaron, Blazek, DePew, Hart, C. Jørgensen, Riccardi, Robbins, Wiegand

The School of Information (iSchool) at Florida State University is one of the top-ranked information and information technology programs in the nation and offers a myriad of opportunities to facilitate people's needs for credible information with complex and highly sophisticated technology. The multi- and inter-disciplinary domains represented by the information field offer some of the most diverse and rewarding professional opportunities available today. Powerful information technologies have fundamentally changed the nature of how information is produced, distributed, acquired, organized, stored, preserved, and analyzed. Information professions serve as a bridge between people, information, and technology, ensuring that information systems are designed to support and empower users, and that the information technology used is usable, useful, reliable, and robust. Information professionals ensure that people can access the credible information they want and need, while at the same time addressing issues such as security and privacy, intellectual property, and information policy.

Established in 1947 as a professional school, the iSchool offers graduate degree programs that provide professional development in information management, information technologies, and information services. The Master of Science in Information Technology degree program is ranked 9th nationally. The Master of Science in Information degree program is ranked 12th nationally, 1st ranked for School Library Media, and ranked 7th for Youth Services among library and information science degree programs nationwide. The Master of Arts (MA) and Master of Science (MS) degree programs in Information are accredited by the *American Library Association* (ALA): <http://www.ala.org/>. The iSchool also offers the Master of Science in Information Technology (MS), a combined bachelor's/master's pathway in Information Technology (BS/MS), the Specialist degree in Information, and the Doctor of Philosophy (PhD) degree in Information, as well as graduate certificate programs in Information Architecture, Health Information Technology, Information Leadership and Management, Reference Services, School Librarian Leadership, and Youth Services. The iSchool is a member of the *Association for Information Science and Technology* (ASIS&T): <https://www.asist.org/>; the *Association for Library and Information Science Education* (ALISE): <http://www.alise.org/>; and is a founding member of the *iSchools* movement: <http://ischools.org/>.

The iSchool's exceptional faculty is highly visible in professional conferences, organizations, and societies; conducts significant ground breaking research; and publishes in highly respected peer-reviewed publication venues. The overwhelming majority of the courses are taught by our faculty, and their professional and academic activities translate directly into a rich, intellectual environment that amply prepares students for future career options. Our graduates are well prepared to work across public and private sector environments from educational institutions, libraries, government and non-profit agencies, to businesses and in any organization that has a significant need to bring people, information, and technology together.

Synchronous Online Courses

Our online courses typically meet for a scheduled day/time in the evenings, during which students participate in webinar-style synchronous online activities. These scheduled days/times are published on the course schedule each semester. Adherence to this schedule may vary from course to course. Some courses use a variety of modes and students should check with the instructor for information about the mode of instruction for a particular course. Visit <http://ischool.cci.fsu.edu/academics/online/>.

Professional Opportunities

In the master's degree programs, students will gain the theoretical foundation, knowledge, and skills necessary to function effectively in a variety of professional positions within the information fields, such as:

- Library Director
- Chief Information Officer (CIO)
- Chief Technology Officer (CTO)

- Information Technology Manager
- Data Scientist
- Digital Youth Specialist
- Information Manager
- Research Data Librarian
- Scholarly Communication Librarian
- Metadata Librarian
- Health Informaticist
- Digital Librarian
- Information Literacy Librarian
- Information Service Librarian
- Computer Security Analyst
- Systems Analyst
- Systems Security Analyst
- Web Developer/Administrator
- Social Media Manager
- Youth and School Librarian

Graduate Programs Available

- Master of Science in Information
- Master of Science in Information Technology
- Master of Arts in Information
- Specialist (Post-Master's) in Information
- Juris Doctor / Master of Science in Information
- Juris Doctor / Master of Science in Information Technology
- Doctor of Philosophy in Information
- Certificate Programs in:
 - Health Information Technology
 - Information Architecture
 - Information Leadership and Management
 - Reference Services
 - School Librarian Leadership
 - Youth Services

Master of Science in Information

The Master of Science in Information degree, accredited by the American Library Association (ALA), requires successful completion of thirty-six semester hours of graduate coursework, which can be earned online. Students must take four core courses in the areas of information organization, policy, research methods, and management; and choose additional courses from one or more programs of study.

Current programs of study include:

- Cultural Informatics
- General Librarianship
- Health Informatics
- Information Organization
- Leadership & Management
- Public, Academic, and Special Libraries
- Reference Services
- School Libraries
- Technology & Networking
- Web Design
- Youth Services

For more information about the MS program, visit <https://ischool.cci.fsu.edu/programs/grad-programs/master-of-science-in-information>.

Master of Arts in Information

A Master of Arts in Information degree, accredited by the American Library Association (ALA), may be earned by students who complete the requirements for the Master of Science degree and six or more semester hours of graduate credit in one or more of the following fields: art; classical language, literature, and civilization; communication (not including speech correction); English; history; humanities; modern languages and linguistics; music; philosophy; religion; and theatre. In addition, they must demonstrate proficiency in a foreign language. For more information about the MA program requirements, visit <https://ischool.cci.fsu.edu/programs/grad-programs/master-of-science-in-information>.

Master of Science in Information Technology

The Master of Science in Information Technology degree requires successful completion of thirty-two semester hours of graduate coursework, which can be earned online. Students must take four core courses in the areas of management of information organizations, information behavior, information systems management, and usability analysis. Students choose additional courses either from one or more programs of study or by designing an individualized approach that best meets their career goals. Current programs of study include: large-scale data management, secure data and systems management, IT leadership and management, technology and networking, user-centered design, and Web design and administration. Programs of study are tailored to professional needs in preparing students for diverse IT careers such as Web developer/administrator, information systems analyst, information security systems analyst, health IT systems specialist, data scientist, and social media manager. A combined bachelor's/master's pathway (BSIT/MSIT) combining a bachelor's degree in Information Technology with a master's degree in Information Technology is also available to eligible undergraduate students, offering them the opportunity to take up to twelve semester hours of graduate coursework, which may be counted toward both the BSIT and MSIT degrees. Information about the combined BSIT/MSIT pathway can be found at: <https://ischool.cci.fsu.edu/programs/undergrad-programs/combined-bachelors-masters-program-in-information-technology>.

For more information about the MSIT program, visit <https://ischool.cci.fsu.edu/programs/grad-programs/master-of-science-in-information-technology>.

Admission Requirements – Master of Science and Master of Arts Programs

In order to be considered for admission to the MS or MA program, a student must present:

- Proof of completion of a baccalaureate degree from a regionally accredited college or university;
- A minimum grade point average (GPA) of 3.0 (on a 4.0 scale) on all upper-division undergraduate coursework toward a bachelor's degree, or an earned minimum grade point average of 3.0 (on a 4.0 scale) on a completed master's degree; and
- Official test results from a nationally standardized Graduate Admissions Entrance Exam, such as the General Test of the Graduate Record Examination (GRE), the Graduate Management Admission Test (GMAT), the Law School Admission Test (LSAT), and the Miller Analogies Test (MAT). The GRE is preferred. The graduate admission exam requirement can be waived for applicants meeting specific criteria: a completed Master's, JD, MD, or PhD degree with a GPA of 3.0 or higher from a regionally accredited institution; two years of professional experience working in the information or information technology field and a 3.0 or higher upper-division undergraduate GPA from a regionally accredited institution; or FSU undergraduate students with an upper-division information technology GPA of 3.2 or higher and an overall GPA of 3.4 or higher.
- Additional supporting application materials: résumé, application fee, FSU Graduate Application, and a statement of purpose.

Additionally, students applying for admission to the Master of Science in Information Technology degree must also provide proof of completion of twelve credit hours of technology-related coursework or two years of information technology-related work experience. A student who does not have this IT background is encouraged to consider completing the graduate Certificate in Information Architecture as a non-degree seeking student prior to applying to the MSIT to meet this requirement. Up to 12 approved semester hours taken as a non-degree seeking student may be transferred toward degree completion requirements upon formal admission to a master's or specialist degree program.

English Language Proficiency: Official English Language Proficiency results are required of all international applicants whose native language is not English. International graduate applicants seeking teaching assistantships are also required to pass a test of spoken English.

Meeting the University's minimum required GPA or graduate school exam scores **does not** guarantee admission to the program. Admission is competitive and applicants must demonstrate academic ability, focus, interest, commitment, maturity, and other evidence that they can succeed in our graduate program and contribute to the profession. The School of Information gives preference for admission to applicants who meet the minimum University requirements for both the GPA and the Graduate Admissions Entrance Exam. For more information about master's degree admission requirements, visit <http://ischool.cci.fsu.edu/academics/graduate/>.

Specialist (Post-Master's) in Information

The specialist degree is a post-master's degree designed for students who are interested in gaining knowledge in new areas within the information field. The focus of the program is to improve and/or develop new skills and professional competencies. Students in this degree plan their specific program of study cooperatively with faculty advisors who will help tailor the program to meet the student's professional needs. The specialist degree requires successful completion of thirty semester hours beyond the MS/MA degree and an optional culminating paper or project upon completion of coursework. For more information about the specialist program, visit <https://ischool.cci.fsu.edu/programs/grad-programs/specialist-in-information/>.

Admission Requirements – Specialist Degree

Admission to the Specialist in Information is highly competitive. The decision is made based on a holistic review of the application, including:

- Work experience
- Prior academic experience
- Graduate Admissions Entrance Examination scores (GRE, MAT, LSAT, or GMAT) OR approved waiver. To request a waiver, complete the online Entrance Exam Waiver Request Form. Entrance exam can be waived for master's and specialist applicants who meet ONE of the following criteria: A completed Master's, JD, MD, or PhD degree with a GPA of 3.0 or higher from a regionally accredited institution;
- Two years of professional experience working in the information or information technology field and a 3.0 or higher upper-division undergraduate GPA from a regionally accredited institution; or FSU undergraduate students with an upper-division information technology GPA of 3.2 or higher and an overall GPA of 3.4 or higher.
- English Language Proficiency exam (TOEFL, IBT, or IELTS—required of international applicants ONLY). **NOTE:** If you have received a bachelor's degree or master's degree from a U.S. institution or other institution where English is the required language of instruction, this test requirement may be waived. For more information about specialist degree admission requirements, visit <http://ischool.cci.fsu.edu/academics/graduate/>.

Timeline for Completion of Graduate Degrees – MS, MA, and Specialist

The work for the master's or specialist degree must be completed within seven years from the time the student first registers for graduate credit. Graduate students must maintain a minimum grade point average of 3.0 (on a 4.0 scale) or better in all work taken at the graduate level. No course with a grade below "C–" (C minus) will be credited toward a graduate degree and no student is eligible for the conferral of a degree if the overall grade point average is less than a 3.0 (on a 4.0 scale). Students whose grade point average falls below 3.0 in any semester are placed on academic probation for the next term; academic dismissal will occur if the minimum 3.0 grade point average is not achieved by the end of the next semester of enrollment.

Juris Doctor/Master of Science Joint Graduate Pathways

The JD/MSI and JD/MSIT Joint Graduate Pathways lead to both a Juris Doctor degree from the FSU College of Law and a Master of Science in Information (MSI) or Master of Science in Information Technology (MSIT) degree from the School of Information. Graduates of these programs are particularly suited to work in law libraries and other organizations involved with the creation, organization, and dissemination of legal information and the management and implementation of legal information technology systems. Students in the Joint Graduate Pathway receive academic advising from both the College of Law and the School of Information.

For the JD/MSI degree, nine semester hours of graduate coursework in Information are credited toward the hours normally required for the Juris Doctor degree and six hours of Law courses are credited toward the thirty-six hours required for the Master of Science degree. This saves the joint-degree student fifteen semester hours of coursework that would otherwise be required to complete both degrees separately. For the JD/MSIT degree, nine semester hours of graduate coursework in Information Technology are credited toward the hours normally required for the Juris Doctor degree and two hours of Law courses are credited toward the thirty-two hours required for the Master of Science degree. This saves the joint-degree student eleven semester hours of coursework that would otherwise be required to complete both degrees separately.

All coursework for both degrees must be completed within a five-year period and both degrees are awarded at the same time. With the exception of the shared credit semester hours described above, students are expected to fulfill all requirements for both degrees.

For more information about the JD/MS Joint Graduate Pathways, visit <https://law.fsu.edu/academics/academic-programs/joint-graduate-pathways>.

Doctor of Philosophy in Information

The Doctor of Philosophy degree (PhD) is a research degree awarded as the result of independent and comprehensive scholarship in a particular area. Students become familiar with a wide range of research methods and develop a background in social science and information theory and phenomena, culminating in the completion of an original piece of research. The goal of the PhD program is to produce highly qualified researchers for academic, corporate, nonprofit, or governmental settings. The goals of the doctoral program are to prepare graduates who:

1. Are familiar with standard techniques of information research;
2. Have mastered definite fields of knowledge so that they are familiar not only with what has been done in their specific fields but also with the potential and opportunity for further advances;
3. Have demonstrated capacity to do original and independent scholarly investigation or creative work in their selected fields.

Each student's program is planned individually, in concert with his/her Major Professor (MP) and Supervisory Committee (SC). Together they must formulate a comprehensive program of study that will ensure a mastery of major areas of interest.

Applicants generally will hold a master's or equivalent degree. Due to the interdisciplinary nature of doctoral activity in information, applications from prospective students representing a wide range of fields are encouraged.

Admission Requirements – PhD Program

Admission to the PhD program is highly selective, based upon the assessment of a number of factors which, when taken together, provide evidence that the applicant possesses superior scholastic ability, has the potential for success in a rigorous graduate program of research study, and will perform well within the broad context of the information field. Among the factors considered are the following:

- Academic records of previous undergraduate, graduate, and professional studies;
- Performance on the general aptitude sections of the GRE;
- Quality and quantity of prior work experience;
- Three or more references provided by the applicants to attest to their experience and their ability to complete advanced study and research successfully;
- A personal statement covering their career objectives, describing their research interests, as well as the specific qualifications of the applicant to pursue doctoral work;
- A recent research paper or writing sample;
- A current curriculum vitae or résumé;
- A digital video of the applicant detailing his/her background information and accomplishments, why he/she is interested in the FSU School of Information, research areas of interest, the faculty with whom he/she would like to work, and goals after completing the PhD.

Admission to the PhD program requires approval of both the University and the School of Information. To be considered for admission, students must present:

1. Proof of Completion of a master's degree from a regionally accredited college or university;
2. A minimum grade point average (GPA) of 3.0 (on a 4.0 scale) on all upper-division undergraduate coursework toward a bachelor's degree and a minimum GPA of 3.0 on a completed master's degree; and
3. Official test results from a nationally standardized Graduate Admissions Entrance Exam, such as the General Test of the Graduate Record Examination (GRE), the Graduate Management Admission Test (GMAT), the Law School Admissions Test (LSAT), and the Miller Analogies Test (MAT). The GRE is preferred.

Preferred GRE Scores

- Verbal - 150
- Quantitative - 149
- Writing - 4.0

English Language Proficiency: Official English Language Proficiency results are required of all international applicants whose native language is not English and who have not studied in an English-speaking country for at least one academic year. The minimum scores required for admission to the School of Information are:

- **Paper based Test of English as a Foreign Language (TOEFL):** 600 total / 61 writing
- **Internet based TOEFL (IBT):** 100 total / 24 writing
- **International English Language Testing System (IELTS):** 7.0

International graduate applicants seeking teaching assistantships are required to pass a test of spoken English.

Completed applications are evaluated by the doctoral program committee, which looks at the totality of the applicant's qualifications. Every effort is made to select those individuals who have the potential to succeed in the program.

All credentials for evaluation for entry must be received by Florida State University by December 1 in order to be considered for university fellowships. For all other applicants, the deadline is January 15. For more information about the PhD degree program, visit <http://ischool.cci.fsu.edu/academics/graduate/phd/>.

Certificate Programs

The School of Information offers graduate-level certificate programs that can be earned online. For more information about certificate programs, please visit <http://ischool.cci.fsu.edu/academics>.

Health Information Technology Certificate

This certificate program prepares information and technology professionals to be managers and leaders in health information technology by educating students in health information, health technologies, and management of information and technology systems and services. This program offers training in areas including electronic medical records systems and eHealth approaches for health promotion and patient self-management.

Information Architecture Certificate

This certificate program prepares information and technology professionals to design, build, and manage a Web site as an information system. This program offers opportunities to enhance skills in areas of Web design, Web applications, administration, and usability, building on students' existing knowledge of Web technologies.

Information Leadership and Management Certificate

This certificate program prepares information and technology professionals to be managers and leaders in their respective fields by enhancing their understanding of the unique challenges facing their profession now and in the future. This certificate program offers training in leadership, management, policy, strategy development, decision-making, customer service, team building, negotiating, and budget and finance.

Reference Services Certificate

This certificate program prepares information professionals to assume the role of an information, research, and instructional specialist in order to provide assistance to patrons. The certificate program offers training in searching, selecting, and using information resources in a wide range of forms and formats; understanding information needs; and communicating and working effectively with diverse populations.

School Librarian Leadership Certificate

This certificate program prepares school librarians to be leaders by strengthening skills in technology integration, instructional collaboration, and information leadership. The certificate program offers training in skills to positively impact learning, collaborate with educators to effectively use library resources tailored to the learning needs of learners, and effectively select and integrate various technologies into the instructional program of the school.

Youth Services Certificate

This certificate program prepares information professionals to be successful youth services specialists. This program offers training in resources, services, and evaluation focused on the information needs and interests of children and youth.

Scholarships, Assistantships, and Fellowships

The School of Information provides several internal opportunities for financial assistance based on a variety of factors. For more information, visit our Web site at <https://ischool.cci.fsu.edu/academics/financial>.

Innovation Hub

The School of Information is a founding partner in the Innovation Hub (The Hub) located on the first floor of the Louis Shores Building. The Hub is a technology innovation collaboration space designed to support Design Thinking with the latest technologies, a Digital Fablab, Virtual Reality Lab, Hackerspace, and more. For more information, visit <https://innovation.fsu.edu/>.

Student Organizations and Honor Societies

Students have the opportunity to become involved with organizations that engage professional interests, build relationships, expand networking opportunities, and continue learning outside the classroom. For more information, visit <http://ischool.cci.fsu.edu/people/students/>.

The American Library Association Student Chapter

As one of sixty active Student Chapter groups, the award-winning FSU iSchool American Library Association (ALA) student chapter seeks to promote the growth of its members in accordance with ALA standards. Founded in 1988, the Student Chapter was the 14th to be officially recognized by the ALA. By becoming a member of the ALA, FSU students gain access to lower membership rates, career opportunities, discounts, national conferences, job listings, newsletters, and invaluable networking opportunities, among other benefits. Student members of the ALA can also apply for the Student-to-Staff position with the ALA annual conference. Those chosen as a representative will receive free conference registration and housing in exchange for four hours of volunteer work per day. Students also have the opportunity to join the Florida Library Association at a discounted price when joining the ALA. The ALA student Chapter also provides access to leaders in the library community by bringing esteemed speakers to our meetings. The FSU ALA Student Chapter has earned national honors as Student Chapter of the Year and runner-up for Student Chapter of the Year.

Beta Phi Mu Honor Society

Beta Phi Mu was founded in 1948 by a group of leading librarians and library educators to recognize and encourage scholastic achievement among library and information studies students. The motto, "Aliis inserviando consumor," meaning "Consumed in the service of others," was selected by the founders based on the concept of dedication of librarians and other information professionals to the service of others. The Gamma Chapter, at Florida State University, was founded in 1957 and is the second oldest continually existent Beta Phi Mu chapter. Eligibility for membership in Beta Phi Mu is by invitation of the faculty from an American Library Association accredited professional degree program.

Institutes and Centers

The School of Information offers a variety of research labs, institutes, and centers, including the eHealth Lab, Social Media Lab and the iSensor Lab, as well as the Information Institute and the Institute for Digital Information and Scientific Communication. For more information about the School of Information's research institutes and centers, visit <http://ischool.cci.fsu.edu/research/institutes/>.

Information Use Management and Policy Institute (Information Institute)

The Information Use Management and Policy Institute (Information Institute) was founded in the summer of 1999 by Dr. Charles R. McClure, and he has been the Director since it began operations. It is dedicated to serving the university community through encouraging the growth and development of faculty resources, student opportunities, and staff enrichment options.

The Institute conducts research that focuses on the information user and the interaction of the user with information products, services, policies, technologies, and organizations. The Institute also conducts information policy research on current issues at every level of government related to public access, privacy, records management, and use of information in electronic forms. Particular emphasis is placed on the planning and evaluation of networked and other information services through analyzing and evaluating the impact of systems from a policy and user perspective.

Institute for Digital Information and Scientific Communication (iDigInfo)

The mission of the Institute for Digital Information and Scientific Communication (iDigInfo) is to advance the science of information analysis and organization, improve the research capabilities of research disciplines, and engage students in research and communication activities.

By employing their unique focus on user information seeking needs, iDigInfo works to be the top international source of information management and analysis activities, especially in the area of the capture and analysis of scientific inference and the information that supports it. Dr. Greg Riccardi is the Director of iDigInfo.

Definition of Prefix

IDC—Interdisciplinary Computing

LIS—Library and Information Studies

Graduate Courses

IDC 5015. Teaching Interdisciplinary Computing (2–3). This course offers teaching assistants and future educators techniques for the effective teaching of computing concepts and skills. Focus is placed on general college-level teaching skills and on the unique challenges of teaching computer skills to students from multiple disciplines, who are not necessarily technically inclined.

LIS 5008. Advanced Online Searching (3). Prerequisite: LIS 5603. The course presents the latest tools, resources, and techniques of searching online database systems (such as DialogWeb and Lexis/Nexis), various Web search tools (such as search engines, directories, and meta-search tools), and methods of delivering search results to clients.

LIS 5020. Foundations of the Information Professions (3). This course provides background information about the information profession and aims to facilitate optimal information management. Topics include librarianship, the disciplines of library-information science (LIS) and of information technology (IT), the organizations and institutions of the information-provision environment, as well as the applications of technology to information provision.

LIS 5025. Educational Concepts and Strategies for School Librarians (3). This course introduces future school librarians to the educational concepts and strategies necessary to function successfully in schools. It examines basic language and concepts of human growth and development, teaching and learning, classroom management, individual differences, standards and observations, as well as contemporary issues related to the field. Relationships with other members of the learning community are examined.

LIS 5028. Writing for the Information Professions (3). This course offers practical hands-on experience with forms and practices of technical and professional writing, including documentation, correspondence, audience analysis, writing for social media, evaluation, and review. This course also emphasizes clear, concise, and effective writing in information technology settings, both within organizations, and for other uses.

LIS 5105. Communities of Practice (3). Prerequisite: LIS 5603. Examines historical, contemporary, and emerging communication patterns and knowledge generation and use in the research, scholarly, and professional communities. Studies the development of communities of practice, their literature structures and communication networks, and information behaviors.

LIS 5203. Information Behavior (3). In this course, students learn how studying information behaviors of users is an essential initial step of information system design of any kind. This course provides students with an overview that emphasizes the user's perspective in the analysis of information needs and preferences, including the fundamentals necessary for the study and understanding of human information behaviors of a variety of users and user groups.

LIS 5241. International and Comparative Information Service (3). This course examines the important role information plays in the lives of individuals around the world. The course focuses on analysis of information management and access at the national or country level in the context of international globalization. Students develop the knowledge, skills and abilities needed to analyze and compare the social, cultural, economic and political factors that affect access to information and information service provisions.

LIS 5255. Information, Technology, and Older Adults (3). This course examines the information and technology needs, uses, and seeking of older adults, with attention to aging in society, successful longevity, lifelong learning, health information, information service provision and evaluation, technology and interface design, technology affordances, and information use environments of older adults.

LIS 5260. Information Science (3). A basic introduction to the interdisciplinary field of information science, including its goals, methods, and applications in information providing/information managing environments. Emphasis is placed on understanding the broad spectrum of topics within information studies.

LIS 5263. Theory of Information Retrieval (3). Prerequisite: LIS 5703 or instructor permission. This course introduces students to theories, models, and systems of information retrieval (IR), including the models of representation for data/information/knowledge and user needs/queries; the models and mechanisms of information relevance establishment, information filtering and personalization; and the models and measures for IR system performance evaluation.

LIS 5270. Evaluating Networked Information Services and Systems (3). This course introduces the importance and applications of evaluating networked information services and systems. It examines a number of research methods and specific data collection techniques to assess their quality and impact, emphasizing assessment in public and governmental sectors. Descriptions of the development of performance measures are also discussed.

LIS 5271. Research in Information Studies (3). This is an introductory course in applied research methods in the social sciences with a particular emphasis on information studies. It provides an overview of the basic issues and methods that information professionals should consider when collecting, analyzing, and evaluating data regarding information programs and services. The course covers scientific inquiry, research ethics, problem formulation, measurement, as well as quantitative and qualitative methods and analysis. It also provides a foundation for evaluating a variety of scientific, technical, business, and government information and for conducting applied research in information-based organizations. This course is appropriate for students with no background in research or analytical methods.

LIS 5273. Practical Library and Information Science Exploration (3). This course blends library and information science theory with practical library experience and application. Students explore alternative approaches to a variety of challenges related to the management of information centers and interact with a variety of working information professionals.

LIS 5275. Usability Analysis (3). This course provides a comprehensive overview of usability analysis and its role in user-centered design. The course is designed to familiarize students with the concepts and procedures necessary to incorporate usability analysis into the information systems design process. At the end of the course, students possess both the resources and skills necessary to conduct usability analyses and evaluate information systems from a user-centered design perspective.

LIS 5313. Digital Media: Concepts and Production (3). This course provides a conceptual and practical introduction to creating and using digital-media resources to support learning and collaboration in information professions. Students regularly engage in media analysis and media production activities that incorporate digital image, sound, and video elements; utilize Web-based collaborative tools; and apply knowledge of fair use, copyright, and copyleft to multimedia.

LIS 5316. Information Graphics (3). The theory and use of graphical presentation of sound and text in both paper and electronically displayed information. Includes critical evaluation, semiotics and cognitive theory.

LIS 5362. Design and Production of Networked Multimedia (3). This course introduces students to the design, creation and management of standards-based, ADA-compliant websites, frameworks, and applications. The course emphasizes principles of user accessibility and user-centered design, as is a focus on the implementation of modern web standards and coding. Students learn how to apply these principles to design, and produce and manage websites, tools and applications using a variety of development and management tools.

LIS 5364. Web Site Development and Administration (3). Prerequisite: LIS 5362. This course introduces topics concerning client- and server-side programming including data interfacing and security; acquiring domain names and Web hosting agencies; data types and operators; building functions and control structures; manipulating data in arrays and strings; accessing files and directories; connecting to and manipulating data resources; managing state information; object-oriented design; debugging and error handling.

LIS 5367. Advanced Web Applications (3). Prerequisites: LIS 5362 and LIS 5364. This course guides students through planning, coding and testing a complete web application. Students build upon their acquired knowledge of the web and application as well as continued exposure to user-centered design principles. The course provides hands-on experience and includes discussion and exploration of practical implications of emerging trends in web design and development.

LIS 5385. Social Computing and Collaboration Technologies (3). This course explores the tools, techniques, and challenges of implementing and managing social and collaboration technologies within and beyond the workplace. Students examine the context of ICTs that organizations use to facilitate communication and collaboration, extend their mission, and engage with audiences via social media. Students actively design solutions to social computing challenges that build on a foundation in ICT skills and knowledge, while allowing students to gain valuable leadership, communication, and organizational skills. The course also explores issues and concerns that may influence the individual and organizational adoption of social computing and collaboration tools.

LIS 5403. Human Resource Management for Information Professionals (3). Prerequisite: LIS 5408. This course explores human resource (HR) concepts, and issues and challenges confronting HR managers working in 21st century information provision environments (IPE). Students learn strategies for effectively managing and implementing HRM policies and programs to facilitate optimal human resource management in the IPE. Students both analyze and synthesize information and demonstrate application of the learning concepts.

LIS 5405. Leadership in Technology (3). This course introduces students to the leadership concepts necessary to build successful information technology infrastructures in a variety of contexts. Through the course, students develop an understanding of IT leadership careers, the roles and responsibilities of IT leaders, evidence-based methods for developing leadership strategies, and how to lead innovative and entrepreneurial technology development in fast-paced environments. The course challenges students to engage in active planning of their careers through the development of leadership vision statements and personal action plans.

LIS 5408. Management of Information Organizations (3). This course introduces management of information organizations and is designed to develop a conceptual framework for integrating fundamental management concepts, principles, policies, theories, and practices into an effective personal management process. Students acquire strategies for developing cohesive, productive management teams through experiential learning.

LIS 5411. Introduction to Information Policy (3). This course examines selected fundamental policy questions regarding information and communications, with special attention to intricate policy issues such as information ownership rights, privacy rights, and public access to information. The course examines such issues by focusing on the underlying constitutional principles, laws and regulations, statutes, and government policies that impact such issues. Specific attention is given to federal policies within the United States but state and local policies are examined as needed. Specific course topics include universal service, information equity, privacy, intellectual property, censorship, e-government, and information management. The course focuses on providing information professionals with a fundamental understanding of the importance and impact of information policy.

LIS 5413. Seminar in Information Policy (3). An analysis of both existing and possible public policies toward the production, dissemination, recording, and ownership of information. The economic, political, and social aspects of policy analysis will be introduced and applied to specific information policy issues.

LIS 5416. Introduction to Legal Informatics (3). This course is an introduction to the role of information technology in the creation, management, and retrieval of legal information in the legal work environment, such as the law office and the law library. It examines the use of information technology in judicial administration and other legal contexts, it introduces the student to various definitions of legal informatics, while also exploring the detailed structure of legal-information database retrieval systems such as LEXIS and Westlaw, as well as other methods of storage and automatic retrieval of law sources.

LIS 5417. Introduction to Legal Resources (3). This course introduces students to legal resources and their use for legal research. Upon completion of this course, the student understands how legal information is organized and structured and is able to retrieve laws and regulations from many sources. This course enables a student to function effectively as an information management professional in any type of legal setting, including a law library.

LIS 5418. Introduction to Health Informatics (3). This survey course evaluates medical informatics from a stakeholder perspective. Beginning with a brief overview of the US health care system, the focus then shifts to understanding to what extent health information needs are met using technology for users such as providers of health care services, clinician educators, consumers, and caregivers.

LIS 5419. Consumer Health Informatics (3). This course explores how information and communication technologies can be used to empower health consumers and improve their medical outcomes. Students examine different eHealth approaches for health promotion, disease prevention, and for supporting patient self-management. Students discuss issues and concerns influencing adoption of these technologies at different levels. The course emphasizes a multi-disciplinary and user-centered approach for designing eHealth interventions using theories and principles from communication, information science, human-computer interaction, medicine, psychology, and public health.

LIS 5426. Grant Writing, Evaluation, and Administration (3). Basic skills in planning, evaluation, and financial management are developed, as well as application of these aspects to the overall management task in the information organization.

LIS 5441. Leadership in Reading (3). This course focuses on the knowledge and skills necessary for informational professionals to provide collaborative leadership in reading across the K-12 spectrum. Special emphasis is placed on how reading for achievement and reading motivation can successfully be reconciled as essential components of information literacy.

LIS 5442. Information Leadership (3). Prerequisite: LIS 5408 (C- or better). This course analyzes evidence-based concepts in order to develop a personalized understanding of 21st century leadership. The course focuses on the development of leadership capacity for information professionals, including how to think reflectively as well as strategically, ethically influence others, design and maintain functional organizations, capitalize on a swiftly changing technological environment, and finally to demonstrate vision.

LIS 5472. Digital Libraries (3). Pre- or corequisite: LIS 5703. This course addresses conceptual, practical, and technical issues, problems and approaches to digital libraries. The course offers a comprehensive overview of design issues, management and evaluation, such as project management, collection development, digitization, metadata, applications, access and user interfaces. The practical experience of building a digital library provides an opportunity to develop useful skills for dealing with real-life issues in digital library projects.

LIS 5474. Business Information and Competitive Intelligence (3). This course introduces students to business information and competitive intelligence for information and technology professions, covering techniques for locating business and competitive intelligence information, and how to analyze, interpret and report the results of business and competitive intelligence research.

LIS 5484. Introduction to Data Networks for Information Professionals (3). This course discusses networking and telecommunications technologies, and management of modern data networks, with emphasis on the building blocks of local and wide area networks. Subjects covered include networking architectures, topologies, models, layers, protocols, IP sub netting, equipment, operating systems, security and various tools and utilities. Also covered are economic and policy issues inherent to telecommunications, and management skills that the professional in this field needs to master.

LIS 5485. Introduction to Information Technologies (3). This course introduces students to Information Technology (IT) on a theoretical and practical level. The course reviews the underlying concepts of IT as embodied in operating systems, hardware, application software, Web site creation, and networks. It ensures that all students have mastered minimum skill and knowledge sets and are prepared to carry out assignments requiring IT skills through the program.

LIS 5487. Information Systems Management (3). This course is an introduction to the role of information systems in organizations and how they relate to organizational objectives and structures. Covers the basics of management and information as they relate to each other in the operation of an information center.

LIS 5489. Network Administration (3). This course focuses on the planning, design, configuration, operation, and management of computer networks containing data communication devices, servers, workstations, and networked applications and support systems. The course introduces students to administrative techniques inherent to basic operating systems, and also to enterprise management systems required by larger organizations. Students examine and discuss issues of scalability, performance management, and integration of internal resources with external resources such as cloud-based systems.

LIS 5511. Collection Development & Management (3). This course is an introduction to the national, state, and local environments, principles, policies and practices that facilitate or inhibit the selection, evaluation, acquisition, access to, maintenance, and evaluation of resources for a library and their use and usefulness.

LIS 5512. School Collection Development and Management (3). This course provides an understanding of the attitudes, knowledge, and skills necessary to manage human resources and provide effective leadership in a school library media program. Covers collection development and management in school libraries. Required for school media certification. Students should take this course the semester before taking the State of Florida media-specialist exam.

LIS 5513. Preservation of Information Materials (3). Introduction to the problems, solutions, management, and ethics of the preservation of library, archive, media, and information center materials.

LIS 5524. Instructional Role of the Informational Professional (3). This course focuses on three concepts: merging instruction theory with practice; learning how to create an instruction program; and learning how to become a successful instructor in information settings. Students develop a conceptual framework for information user education, which includes an overview of learning theory, teaching methods, and instructional design. Students learn how to create, teach, evaluate, and manage an instruction program.

LIS 5528. Storytelling for Information Professionals (3). This course provides instruction for the practice and application of the oral tradition of storytelling. The overall intent of the course is to facilitate the oral tradition of storytelling within library and information studies (LIS).

LIS 5564. Information Needs of Children (3). Materials for children in relation to their needs, interests and abilities. Evaluation and use of print and audiovisual materials.

LIS 5565. Information Needs of Young Adults (3). This course is an overview of the characteristics and the information needs of young adults and the resources and strategies that may assist adults and youth in meeting these needs. Developmental stages of young adults are taken into consideration in understanding their information needs. This course focuses on fiction and nonfiction materials published specifically for ages 12–18 (grades 6–12, or middle and high school), but from time to time incorporates resources designed for younger children and for adults that are also appropriate for young adults.

LIS 5566. Diverse Resources for Children and Young Adults (3). This course focuses on evaluating both United States and international literature and information resources for children and young adults from the perspective of diversity. Students explore various diversity issues, including race, ethnicity, sexuality, gender identity, ability, religion, and the immigrant experience. Students employ strategies for using literature and information resources to meet the developmental, informational, and recreational needs of children and young adults in relation to these issues. Discussion includes various resource formats, selection criteria, and promotional strategies.

LIS 5567. International Literature for Children and Young Adults (3). This course provides students an opportunity to explore literature for children and young adults originating in a nation other than the United States. The course draws examples from literary awards for each continent, discusses unique issues of evaluation and provides a comparative view of themes across cultures to increase global understanding, and describes strategies for promoting and using international literature for youth with children, young adults, and adults.

LIS 5576. Information Needs of Adults (3). This course examines the nature and societal aspects of adult information needs, sources, and uses. The focus of the course is on fiction and non-fiction genres; formal, popular, and alternative information sources; and the cultural values of entertainment and information, as well as the relationship between the two. The course also examines print, electronic, and mass-media sources and uses within their social contexts.

LIS 5577. Graphic Novels in Libraries (3). This course is a survey of graphic novels, including manga and manhwa, for readers of all ages, but focuses primarily on materials for young adults and adults. Students examine issues related to evaluation, collection development, organization, promotion, readers' advisory, programming, intellectual freedom, and the use of graphic novels in schools and college classrooms.

LIS 5590. Museum Informatics (3). This course provides an introduction to museum informatics, the study of the sociotechnical interactions that occur between people, information, and technology in museums and other cultural heritage organizations. Students explore the changing nature of information technology in museums, and examine how technical innovations are influencing the social worlds of museums, museum professionals, and museum visitors.

LIS 5602. Marketing of Library and Information Services (3). This course provides students with the concepts, techniques, and illustrative examples needed to develop first-rate marketing skills. These skills facilitate strategic planning that is cost effective and customer-centered in its approach.

LIS 5603. Introduction to Information Services (3). This course introduces reference/information work using print and online sources; the course also explores current trends, professional topics, and issues relevant to information-providing agencies in traditional and online environments.

LIS 5631. Health Information Sources (3). This course provides an overview of health information resources used in different contexts including clinical care, research and continuing medical education, as well as patient health care and health promotion and communication. Students evaluate and explore a variety of medical and consumer health information sources. The course discusses issues, trends, and policies related to the retrieval and use of health information including the different stakeholders that shape these (e.g., local, state and national organizations and professional associations). Course material is intended for those interested in professions that require the use and/or provision of medical and consumer health information sources in a variety of settings including bio-medical research, continuing medical education, clinical care and patient education.

LIS 5661. Government Information (3). The course provides an introduction to government information sources and research, with focus on U.S. government information. Students learn about the structure of government and the dissemination of government information resources to the public, including techniques for locating and using government information sources.

LIS 5703. Information Organization (3). This course establishes the conceptual and practical framework for organizing and retrieving information, including the study of systems, their objectives and structures, formats, standards, and vocabularies. The course also covers the information object and its relationship to organizing systems and to other information objects.

LIS 5711. Cataloging and Classification (3). Prerequisite: LIS 5703. This course is an examination of problems of entry, description, and subject analysis including the Library of Congress classification. Covers analysis and evaluation of problems relating to the organization, operation, and management of a cataloging department.

LIS 5736. Indexing and Abstracting (3). This course takes a practical approach to indexing and abstracting. The course covers manual and automatic processes and methods of abstracting and indexing, database organization and design. The course places emphasis on subject access, indexing, and abstracting in an online environment with attention to production rules, standards, and file organization.

LIS 5751. Computers as Persuasive Technology (3). This course explores the design and use of digital technologies for the purpose of influencing individuals' attitudes or behaviors in a number of contexts (i.e., e-commerce, social marketing, education, health, etc.). This course emphasizes a user-centered approach that draws on theories and methods from multiple disciplines including psychology, human behavior studies, communication and human-computer interaction to inform the design of persuasive experiences delivered through interactive technologies and applications.

LIS 5765. Data Mining and Analytics (3). Prerequisite: Completion of at least one database course at the undergraduate or graduate level: LIS 2780, LIS 3781, LIS 3784, or LIS 5782. This course introduces data mining methods and applications. In this course, students learn basic concepts and tools for data mining, including data sources, data cleaning tools and methods, mainstream algorithms for data mining, statistical modeling, popular tools for mining structured data and unstructured data. Students also learn how data mining can be effectively used in various application areas, with the focus on healthcare, to drive decisions and actions. This course is appropriate for students with basic knowledge and skills in database management systems. Prior programming skills are helpful but not required.

LIS 5771. Information and Image Management (3). The scope and problems of the administrative management of records. Emphasis on the importance of managing and controlling records from the time of their creation until their vital disposition.

LIS 5775. Organizational Information Security (3). Prerequisite: Master of Science in Information Technology students only; or instructor permission. This course looks at management issues and practical implications related to securing organizational information systems. This course focuses on the IT security threat environment, cryptography, securing networks, access controls, firewalls, host hardening, application security, data protections, and incident response. A clear theoretical understanding supports a large practical component. Students learn to audit and troubleshoot information systems, and use contemporary security software.

LIS 5782. Database Management Systems (3). This course is an introductory database course appropriate for students who have basic knowledge about information organization. Although several database models are briefly presented, the course focuses on the relational model, the basis for most currently installed production database management systems (DBMS). The course covers the principles of database design and implementation including relational concepts, data modeling, conceptual and logical database design, use of SQL as a data-manipulation language, and current issues in database administration.

LIS 5786. Introduction to Information Architecture (3). This course provides an overview of the information architecture design process, from assessing user needs, through organizing information resources, to documenting the design of information systems and spaces. Students learn how to design information systems that support specific information needs, taking into account the social and organizational contexts of their users from an information architecture perspective.

LIS 5787. Fundamentals of Metadata Theory and Practice (3). Prerequisite: LIS 5703 or instructor permission. This course introduces students to the basic theories and principles of metadata design and creation using ER modeling, XML and RDF. The course reviews major conceptual frameworks, ontologies and metadata schemas used in libraries, archives, museums, and digital data repositories. Real-life scenarios and collections are used to highlight and gain understanding of the issues related to metadata creation, aggregation, and reuse.

LIS 5788. Management of Health Information Technology (3). This is an introductory course in management of Health Information Technology (HIT) within a variety of organizational contexts. It is designed to develop a conceptual framework for integrating fundamental HIT management concepts, principles, policies, theories, and practices into an effective personal management process that relates to health-related organizations (broadly defined) of the 21st century. In addition, students acquire strategies for developing cohesive, productive HIT management teams through experiential learning.

LIS 5900r. Directed Individual Study (1-3). (S/U grade only). Guided studies for individual professional and subject needs. May be repeated to a maximum of six semester hours.

LIS 5916r. Issues in Information Studies (3). This course directly investigates selected problems, issues, and trends in information studies, with an emphasis on research. Topics may vary between offerings. May be repeated to a maximum of six (6) credit hours; repeatable within the same term.

LIS 5945r. Internship (0-12). (S/U grade only). An opportunity to learn how information and technology principles and techniques are applied in a professional setting. A minimum of forty-five hours on the job per semester hour earned is required. May be repeated within the same term to a maximum of twelve semester hours.

LIS 5971r. Thesis (2-6). (S/U grade only). May be repeated to a maximum of six semester hours. Thesis must be completed for a total of either three or six credits.

LIS 6024. Seminar in Theory and Foundations of Information Sciences (3). This course is a critical examination of the theoretical and foundational literature of information sciences. Readings in seminal works provide a rich background and context for analyzing and understanding current problems and future trends in LIS and developing research and applications to solve fundamental problems.

LIS 6027. Statistics and Data Analysis for Information Studies (3). This course is an introduction to statistical analysis for students pursuing a doctorate in information studies. The course provides a foundation in statistical techniques that are often used in information studies and prepares students for more advanced statistics courses. The course also covers descriptive statistics, probability distributions, inference, hypothesis testing, correlation, simple regression, multiple regression, ANOVA, and ANCOVA. Students become proficient using statistical software applications to analyze data sets in order to research questions.

LIS 6040. Teaching in Information Studies (3). (S/U grade only). This course introduces future Teaching Assistants to the basic skills they need to succeed as a TA, including an introduction to multiple teaching and learning styles, course building and management, using technology in the classroom, developing rubrics, leading the classroom, and assessing student work.

LIS 6106. Information Systems Research in Organizations and Society (3). This seminar provides students with a broad range of topics, theoretical perspectives and foundational concepts concerning information systems (IS) research in organizations and society. To facilitate rigorous IS research, the course covers topic areas such as adoption of digital media and systems, computer-mediated communication and collaboration, social networks, knowledge management, IT-enabled organizational change, inter-organizational relationship, community and open innovation.

LIS 6205. Seminar in Information Behavior (3). This course prepares doctoral students to do research focusing on an aspect of information behavior through the examination of the art of discovering issues in Information Behavior. The seminar introduces a range of techniques applied to the analysis of information behavior, with a focus on ethnographic methodologies. The course provides an overview of information behavior and the fundamentals to a broad approach emphasizing a unifying structure to understand information, information needs, information seeking, and information behavior.

LIS 6269. Seminar in Information Science (3). The course introduces students to the core research and practice areas of Information Science (IS). The course emphasizes group reading, discussion and collaborative critical analysis of the methods, findings, and impacts of assigned readings.

LIS 6272. Qualitative Research in Information Studies (3). This course covers a variety of qualitative research methods that may be used in library and information science. It explores general, epistemological, and ethical issues with qualitative research; methods of data collection; techniques for data analysis; and evaluation of qualitative research. It includes readings, short- and long-form writing, in-class discussions, and practical exercises in qualitative research.

LIS 6278. Seminar in Theory Development (3-5). This course requires students to discuss and critique the structural components and research processes related to the origination, construction, and evolution of theory. The seminar provides students with an awareness of the historical and social conditions that influence a tradition of ideas

LIS 6279. Research in Information Studies (3). This course surveys the research methods commonly used in information studies. Students learn to design, evaluate, and present research. Focus is on the preparation of designs for conducting individual research leading to a dissertation research project.

LIS 6289. Seminar in Education for Information Studies (3). This course, within the framework of University and professional education, is an examination of the aims, structures, and issues related to education for information issues. Includes curricular content and design, faculty, students and finance and administration.

LIS 6662. Seminar in Information Policy (3). Identifies/analyzes selected issues related to government information policies, and considers policy alternatives to better access state/federal information. Examines research methodologies to investigate information policies.

LIS 6759. Seminar in Intellectual Access (3). This course introduces students to the core research and practice areas, the basic concepts, principles, methods and tools of knowledge organization and representation. The course emphasizes group reading, discussion and collaborative critical analysis of the methods, findings, and impacts of assigned readings.

LIS 6909r. Directed Individual Study (1-9). (S/U grade only). In this course, specific activities vary based on the contract negotiated between the student and the instructor and reflect the student's need to acquire skills and gain experience in specific topic areas. Directed Individual Study is not available as an alternative version of a course otherwise offered on a regular basis by the college. May be repeated within the same term to a maximum of twelve semester hours.

LIS 6911r. Research Collaboration (1-5). (S/U grade only). Prerequisite: LIS 6279. This course provides students with experience in conducting research under the guidance of faculty. The student participates in the supervising faculty member's research program and can be involved in theory building, literature reviews, research design, data collection, data analysis and report writing. May be repeated to a maximum of five semester hours.

LIS 6919r. Issues in Information Studies (1-3). This course is a directed and supervised detailed investigation of selected problems, issues, and trends in the various areas of information studies including, cataloging and classification; work with the disadvantaged; children and youth services; academic, public, school, and special libraries; administration; and information science. Each offering is different because of the currency, and thus, the changing nature of the subject matter. May be repeated within the same term to a maximum of fifteen semester hours.

LIS 6936r. Proseminar in IS Research and Teaching (1). (S/U grade only). This course introduces students to research and teaching within the field of Information, as well as orienting students to current issues relevant to preparing for teaching and research careers. The course emphasizes reading, discussion and collaborative critical analysis of the methods, findings, and impacts of assigned readings, and presentations by students and invited speakers.

LIS 6939. Seminar in Experimental and Survey Research Design (3). Prerequisites: LIS 6024, LIS 6027, LIS 6279 and Doctoral student standing. This seminar course introduces students to concepts and principles related to the effective design of research using experimental and survey methodologies and techniques. This course focuses on methodological and design issues in planning experiments, quasi-experiments, and survey research. The course equips students with the knowledge and skills required to conceptualize a research project using experimental or survey research methodology, and prepares students to conduct independent research using these methodologies.

LIS 6965r. Preliminary Exam Preparation (1-9). (S/U grade only). Prerequisite: Completion of the 27 hours of required doctoral coursework; approval of Major Professor and Supervisory Committee. This preliminary exam is the milestone that determines a student's readiness to advance to candidacy. May be repeated to a maximum of twenty-four hours within the same term.

LIS 6980r. Dissertation (2-12). (S/U grade only). In this course, dissertation credits are to be arranged in consultation with major professor. A maximum of twelve semester hours may be taken in any given semester. University regulations require that a minimum of twenty-four hours of dissertation credit (LIS 6980) be earned between the time the student is admitted to candidacy and the date the degree is awarded. The candidate must register for a minimum of two hours each semester. The number of credit hours taken each semester should represent the proportion of time devoted to the dissertation, whether on or off campus.

LIS 8964r. Doctoral Preliminary Examination (0). (P/F grade only.)

LIS 8976r. Master's Thesis Defense (0). (P/F grade only.)

LIS 8985r. Dissertation Defense Examination (0). (P/F grade only.)

INSTITUTIONAL RESEARCH:

see Educational Leadership and Policy Studies

INSTRUCTIONAL SYSTEMS:

see Educational Psychology and Learning Systems

**Graduate Department of
INTERIOR ARCHITECTURE & DESIGN****COLLEGE OF FINE ARTS****Website:** <http://interiordesign.fsu.edu/>

Chair: Jill Pable; Professors: Pable; Associate Professors: Dawkins, Huber, Ransdell, Webber; Assistant Professors: McLane, Sickler, Robinson; Specialized Faculty: O'Keefe; Adjunct Faculty: Nasab, Osborne, Saginario, Willoughby; Professors Emeriti: Butler, Koenig, Munton, Myers, Ohazama, Waxman, Wiedegreen

The Department of Interior Architecture & Design offers a Master of Fine Arts (MFA) degree in interior design, a Master of Science (MS) degree, and a Master of Arts (MA) degree. For information and complete program requirements, please contact the department.

The MS and MA advanced-professional research degree programs require a minimum of thirty-two semester hours. These programs are intended for candidates with an undergraduate degree in interior design or architecture. The focus is on advanced, specialized skills to enhance professional practice potential. Candidates requesting the MA degree title must comply with the university requirements of language and humanities at the graduate level.

The MFA degree program consists of a minimum of sixty semester hours including a minimum of eight hours of thesis. It is primarily intended for individuals who will eventually pursue careers in higher education, specialized research, and/or evidence-based practice. In order to maintain close faculty supervision only a limited number of candidates are accepted into the MFA program.

Admission Requirements

Admission to master's degree programs is based on University requirements as detailed in the "Graduate Degree Requirements" chapter of this *Graduate Bulletin*, a portfolio of work, three letters of recommendation, a résumé, statement of interest, a writing sample (for MFA applicants), and a phone or in-person interview with the Director of Graduate Studies. A minimum 3.0 grade point average from undergraduate studies and an acceptable score on the Graduate Record Examinations are required. The GRE requirement is waived for MS/MA advanced-professional and MFA degree program applicants with a GPA that exceeds 3.25 in the last sixty hours of their undergraduate degree. See department for details.

Definition of Prefix

IND—Interior Design

Graduate Courses

IND 5005. Survey of Interior Design (5). Foundation course. Under this course students without an undergraduate degree in interior design study the elements and principles of design, color theory, space planning, and technical skills.

IND 5028. Creative Problem-Solving (3). This course is designed to investigate and study the cognitive and thinking process and its application to problem solving.

IND 5105r. History of Interiors Seminar I (3). Advanced study of history of interiors, furnishings, and architecture from antiquity through the Renaissance. May be repeated to a maximum of six semester hours.

IND 5135r. History of Interiors Seminar II (3). Prerequisite: IND 5105r. Advanced study of history of interiors, furnishings, and architecture of the seventeenth and eighteenth centuries. May be repeated to a maximum of six semester hours.

IND 5157. Historical Restoration, Research and Documentation (3). This seminar provides the opportunity for advanced study in the historiography, research and documentation of restoration and preservation procedures, sources of antiquity and reproductions.

IND 5165r. History of Interiors Seminar III (3). Prerequisites: IND 5105r and IND 5135r. Advanced study of the history of interiors, furnishings, and architecture of the contemporary movement from the 19th century to the present. May be repeated to a maximum of six semester hours.

IND 5208. Design Fundamentals (3). This course centers on the study and development of two- and three-dimensional design projects using the elements and principles of design.

IND 5235. Graduate Studio I (3). This course is an advanced analysis and planning of interior environments.

IND 5236. Graduate Studio II (3). This course explores advanced analysis and planning of interior environments.

IND 5257. Graduate Studio III (3). Prerequisite: IND 5236. Graduate level studio focuses on non-residential projects in creative problem solving with emphases on programming and spatial analysis.

IND 5258. Graduate Studio IV (3). Prerequisite: IND 5257. This is an advanced graduate application of the design process in the form of a large scale project involving comprehensive research and execution in metric. Emphases are on technological presentation techniques and systematic design development from concept to construction documents.

IND 5280. Graduate Studio V (3). Prerequisite: IND 5258. This studio culminates in the creation of student-generated design projects focused on the conceptual and schematic phases of project development.

IND 5281C. Graduate Studio VI (5). Prerequisite: IND 5634. This course concentrates on student-selected advanced interior design projects involving critical thinking and creative problem-solving. The project involves design programming and in-depth research studies in both written and graphic form. Student work will evidence advanced design processes and innovative graphic communication of highly developed design ideas.

IND 5282C. Graduate Studio VII (5). Prerequisite: IND 5281C. This course involves the final phase of the master's project and wraps on the Pre-Design and Schematic Design efforts undertaken and the preliminary documents produced in Studio VI. This course emphasizes the completion and final presentation of the student's master's degree project wherein the critical thinking and creative problem-solving skills essential to graduate studies in interior design are demonstrated in a comprehensive manner.

IND 5315. Advanced Visual Communication (3). Prerequisite: IND 5634. In this course, students explore current media used to communicate complex research and design ideas by assessing and developing effective communication strategies.

IND 5316r. Design Graphics II (1-4). Advanced studio in watercolor or other graphic techniques used in interior delineation. (Studio.) May be repeated to a maximum of eight semester hours.

IND 5317. Design Graphics I (3). Advanced detailed study of graphic techniques used in interior delineation. (Studio.)

IND 5425. Graduate Technical Design (3). Advanced exploration of the technical aspects of interior design.

IND 5428. Materials and Methods (3). Prerequisite: IND 5235. This course offers an in-depth exploration of furnishings and finishes for interiors, focusing on the aesthetic and performance qualities of the materials typically utilized in interior spaces. Emphasis is placed on the relationship between manufacturers, interior designers, installers, and clients with regard to liabilities and product warranties.

IND 5435. Graduate Lighting Seminar (3). Detailed study of lighting and electrical plans, reflected ceiling plans, calculations, and acoustics.

IND 5445. Graduate Furniture Design (3). Prerequisite: Instructor permission. This course is advanced graduate study in furniture design and fabrication applying principles of ergonomics and anthropometrics.

IND 5476. Computer-Aided Design I (3). This course teaches computer-aided design and drafting using AutoCAD software. Students develop an understanding of how designers and architects use computers and how AutoCAD can be applied to other types of software.

IND 5477. Computer-Aided Design II (3). This course is an advanced computer-aided design class focusing on tools and software to aid in three-dimensional design.

IND 5479. Construction Systems (3). Prerequisite: IND 5235. This lecture course focuses on general construction techniques, terminology and sustainability. Integration of the building systems of structure, plumbing, mechanical and fire safety is emphasized.

IND 5487. Construction Documents (3). Corequisite: IND 5236. This studio course focuses on the generation of a comprehensive set of specifications and construction drawings.

IND 5508. Professional Practices (3). This course is an advanced analysis and research into the theory and philosophy of professional interior design practice with emphasis on business development, management, marketing and contract administration.

IND 5526. Graduate Portfolio Review II (1). (S/U grade only). This course is a faculty review of all graduate student work after completion of the program. The conferring of a master's degree in interior design is dependent upon a satisfactory grade in this review.

IND 5528. Graduate Portfolio Review I (1). (S/U grade only). A faculty review of all graduate student work after completion of the foundation course IND 5005, or on admittance to the program if the student has an undergraduate design degree. Continuation in the degree program is dependent upon a satisfactory grade in this review.

IND 5609. Graduate Seminar: Social-Psychological Aspects of Design (3). This course is an exploration of the relationship between humans and their environment through the study of personal and social use of space, proxemics, spatial analysis, and the effects of the environment on human behavior.

IND 5628. Principles of Sustainable Design (3). This course gives students a basic introduction to the fundamentals of sustainable design in order to better understand the inter-relationships between the built environment and nature.

IND 5634r. Pre-Design Research and Programming (3-6). Prerequisite: IND 5637. This course provides entering graduate students with a basic understanding of the role of pre-design research and programming in interior-design project development.

IND 5636. Graduate Seminar: Design Theory and Criticism (3). This course is a survey of the aesthetic, political, economic and social theories that have shaped modern design, including critical methods applied to design integral to culture and human expression.

IND 5637. Graduate Seminar: Research Methods in Design (3). This course is designed to give students a basic introduction to the fundamentals of research in interior design. Included in this course are a survey of the major types of research and an overview of what is involved in the inception, planning, and conduction of a research project.

IND 5638. Graduate Seminar: Design Issues (3). This course provides a critical appraisal of the historical, philosophical, and contemporary trends and issues in the design field.

IND 5910r. Directed Individual Study (1-3). (S/U grade only). Student has the opportunity to pursue independent work under the direction of a faculty member. May be repeated to a maximum of twelve semester hours.

IND 5911r. Supervised Research (1-5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three semester hours may apply to the master's degree.

IND 5930r. Special Topics in Interior Design (1-4). Topics vary from term to term. May be repeated to a maximum of eight semester hours as topics vary.

IND 5944r. Field Research in Space Organization (1-8). A maximum of eight semester hours may be applied toward the master's degree. Independent study and planning of a large environment. Prospectus must be approved by the Graduate Coordinator, Interior Design Graduate Committee.

IND 5945r. Supervised Teaching (1-3). (S/U grade only). May be repeated to a maximum of three semester hours. A maximum of three semester hours may apply to the master's degree.

IND 5948r. Graduate Internship (1-3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

IND 5971r. Thesis (1-6). (S/U grade only). A minimum of six semester hours credit is required.

IND 8976r. Master's Thesis Defense (0). (P/F grade only.)

Graduate Program in INTERNATIONAL AFFAIRS

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <http://www.coss.fsu.edu/internationalaffairs/>

Director: Lee K. Metcalf (Social Sciences); **Director of Undergraduate**

Studies: Whitney Bendeck (Social Sciences); **Director of International**

Economic Education: Onsurang Norrbinn (Economics); **Director of Internships**

and Professional Development: Na'ama Nagar (Political Science)

International Affairs is an interdepartmental degree program leading to the degrees of Master of Arts (MA) or Master of Science (MS). Courses are to be selected from the participating programs of Anthropology, Economics, Geography, Political Science, History, Law, Modern Languages and Linguistics, Philosophy, Public Administration, Religion, Sociology, and Urban and Regional Planning. Courses from outside the participating departments, for example, the College of Education, may be credited toward the degree as long as the course hours do not exceed ten semester hours. Joint Graduate Pathways are also offered in cooperation with the College of Law and the Department of Urban and Regional Planning.

Most students in the degree program anticipate careers in government, business, international organizations, journalism, or teaching, although the degree program can serve as a stepping stone into more specialized doctoral programs. The program is structured so that it can be individually tailored to a wide variety of career goals. Foreign-policy oriented positions within the United States federal government are only one important possibility. State governments, particularly Florida, are increasingly involved in activities with an international component, creating a demand for those trained to deal with the international environment. Similarly, business firms, even those that do not yet rely extensively on export markets, must deal knowledgeably with international competition and other international economic forces which affect their ability to survive in the marketplace. A large number of international organizations, whether intergovernmental and associated with the United Nations, for example, or private nonprofit organizations, also rely on people who are trained in any one of several traditional disciplines, integrated with an international, interdisciplinary emphasis.

Students in the master's degree program take courses with distinguished faculty members with related interests in any of the ten participating departments and school. Each student's supervisory committee is also made up of faculty from the participating departments and school. These faculty members may share an interest in a particular geographic area, for example, or in a topical specialty such as political and economic development or national security. Applicants can compete for the department's graduate assistantships.

Study Abroad Programs

International affairs students are encouraged to participate in the University's intensive study abroad sessions held each summer. Programs designed for graduate students are available in Dubrovnik, Istanbul, Panama, Prague, and Moscow. The programs are designed to expose students to a wide variety of issues and resources relating to their curriculum in an international setting.

Internships

The Degree Program in International Affairs provides a variety of internship opportunities designed to supplement coursework toward the master's degree. Some internship placements are with agencies and businesses in Florida's capital that work in the international arena. Others are available in Washington D.C. through our partnership with the Washington Center Program. Students can also apply for one of the several internships available in London where we place our students in Parliament, the American Embassy, Amnesty International, NBC, the Associated Press, the British-American Chamber of Commerce, and other significant organizations or in Panama with U.N. regional offices. All internships must be approved in advance by the program director.

Requirements

A candidate is admitted to the degree program by meeting the University's general requirements for graduate admission and by recommendation of the director and executive committee of the degree program. It is recommended that the student have undergraduate preparation in those fields where graduate work is contemplated. A candidate is admitted to the program by meeting the general requirements for graduate study. All applicants must take the verbal and quantitative portions of the Graduate Records Examinations (GRE) or

equivalent prior to admission to the program. International students must submit official English proficiency test scores (TOEFL or IELTS) if their native language is not English.

The program is a total of thirty-one (31) credit hours, where students choose between completing a comprehensive exam or thesis route. Students selecting the first option will undergo comprehensive examination on the coursework taken for the degree during their last semester in the program. The choice will depend upon career objectives. Students must have prior approval of the director before selecting the thesis option.

All students are required to take:

1. International Affairs Courses: INR 5935r, Special Topics (Colloquium) for one (1) semester hour; INR 5012, Problems of Globalism for three (3) semester hours; and INR 5938, Joint Seminar in International Affairs for three (3) semester hours
2. At least nine (9), but no more than eighteen (18), semester hours in one of the participating programs
3. Coursework in at least three (3) of the participating programs
4. At least six (6) hours focusing on the developing or post-Communist world (i.e., outside of the United States, Canada, Western Europe, Japan, Australia, and New Zealand)
5. A written master's comprehensive examination for the course type degree program or six hours of thesis hours and an oral master's thesis defense for the thesis type degree program.

Eight (8) semester hours in the thirty-one (31) hour program may be selected from outside the participating programs with the director's approval.

While students can take undergraduate courses as a graduate student, undergraduate coursework will not be eligible to count toward the thirty-one (31) credit hours. All thirty-one (31) credit hours must be 5000 and above.

All students must satisfy the foreign language requirement for the MA degree, even if they choose to graduate with a MS degree. Proficiency in a modern foreign language will be demonstrated by either: 1) passage of a Graduate Reading Knowledge Exam administered by the Department of Modern Languages and Linguistics at Florida State University (GER 5069, ITA 5069, POR 5069, RUS 5069, SPN 5069); 2) completion of twelve semester hours of college level coursework in a foreign language with an average grade of at least 3.0 ("B"); or 3) four years of a single language in high school; 4) if first language is **not** English: TOEFL or IELTS.

Up to six semester hours of language study beyond the initial twelve semester hours may be counted toward the degree requirements when taken under the appropriate graduate level numberings, as long as those courses represent work over and above that required to fulfill the foreign language requirement.

Required Core Courses

- INR 5012 Problems of Globalism (3)
 INR 5935r Special Topics (1-3) [Colloquium]
 INR 5938 Joint Seminar in International Affairs (3)

Recommended Courses

Note: Descriptions of the following courses can be found under the departmental listings. In addition to the courses listed below, special topics courses may be approved by the program director in any particular term. These courses appear on the term course lists and are available at the *International Studies Canvas Organization* site as well as the program office in 211 Bellamy.

Anthropology

- ANG 5115 Seminar in Archaeology (3) [Environment and Climate in Human]
 ANG 5134 Nautical Archaeology of the Americas (3)
 ANG 5137 Nautical Archaeology: Global View (3)
 ANG 5172 Historic Archaeology (3)
 ANG 5240 Anthropology of Religion (3)
 ANG 5242 Symbol and Ritual (3)
 ANG 5266 Economic Anthropology (3)
 ANG 5275 Human Conflict: Theory and Resolution (3)
 ANG 5309 Conquest of the Americas (3)
 ANG 5352 Peoples and Cultures of Africa (3)
 ANG 5426 Kinship and Social Organizations (3)
 ANG 5471 Technology and Social Change (3)
 ANG 5478 Cultural Evolution (3)
 ANG 5491 Seminar in Social Anthropology (3) [Anthropology of Disaster]

ANG 5737 Medical Anthropology (3)

Economics

ECO 5005 Economic Principles for International Affairs (3)
 ECO 5208 Global Macroeconomics (3)*
 ECO 5305 History of Economic Thought (3)
 ECO 5706 Seminar in International Trade Theory and Policy (3)
 ECO 5707 International Trade (3)*
 ECO 5715 International Finance (3)*
 ECO 5716 Seminar in Theory and Policy of International Finance (3)
 ECP 5115 Seminar in Economics of Population (3)
 ECS 5005 Seminar in Comparative Economic Systems (3)
 ECS 5015 Economic Development: Theory and Problems (3)

*Consult with instructor and see course description for required prerequisite coursework

Geography

GEA 5195r Advanced Area Studies (3). (Various regions)
 GEO 5305 Biogeography (3)
 GEO 5358 Environmental Conflict and Economic Development (3)
 GEO 5406 Black Geographies (3)
 GEO 5417 Race and Place (3)
 GEO 5425 Cultural Geography (3)
 GEO 5453 Global Health (3)
 GEO 5472 Political Geography (3)
 GEO 5704 Transport Geography (3)

History

AMH 5278 United States Since 1945 (3)
 AMH 5518 Twentieth-Century United States Foreign Relations (3)
 ASH 5266 Central Asia Since the Mongols (3)
 EUH 5246 WWI: Europe, 1900–1918 (3)
 EUH 5285 Europe Since 1945 (3)
 EUH 5338 History of East Central Europe, 1815 to the Present (3)
 EUH 5365 The Balkans Since 1700 (3)
 EUH 5457 The Age of the French Revolution, 1715–1795 (3)
 EUH 5458 Napoleonic Europe, 1795–1815 (3)
 EUH 5467 Weimer and Nazi Germany (3)
 EUH 5578 19th-Century Russia (3)
 EUH 5579 20th-Century Russia (3)
 HIS 5256 War and the Nation State (3)
 HIS 5265 War and Society In the Age of Revolution (3)
 LAH 5475 History of the Caribbean (3)
 LAH 5749 Social Revolutionary Movements in Latin America (3)
 WOH 5246 World War II (3)

Philosophy

PHH 5405r Modern Philosophy (3)
 PHH 5505r 19th Century Philosophy (3)
 PHH 5609r Contemporary Philosophy (3)
 PHI 6425r Philosophy of Social Sciences (3)
 PHI 6607r Ethics (3)
 PHM 6205r Social and Political Philosophy (3)

Political Science

CPO 5127 Seminar in Comparative Government and Politics: Great Britain (3)
 CPO 5407 Seminar in Comparative Government and Politics: The Middle East (3)
 CPO 5740 Comparative Political Economy (3)
 CPO 5934 Selected Topics (3)
 INR 5036 International Political Economy (3)
 INR 5088 International Conflict (3)
 INR 5934 Selected Topics (3)

Public Administration

PAD 5079 Unmanned Aircraft Systems in Emergency Management (3)
 PAD 5106 Public Organizations (3)
 PAD 5173 Nongovernmental Organizations (3)
 PAD 5208 Budget and Finance in Non-Profit Organizations (3)
 PAD 5310 Disaster Management Planning for Urban Poor Communities (3)
 PAD 5376 Introduction to Terrorism: Preparedness and Response (3)
 PAD 5377 Advanced Topics Terrorism (3) [requires prerequisite course PAD 5376]
 PAD 5389 Disasters: From Shock to Recovery (3)
 PAD 5397 Foundations of Emergency Management (3)
 PAD 5398 Emergency Management Programs, Planning, and Policy (3)
 PAD 5475 Women, Disasters, and Conflict (3)
 PAD 5835 International and Comparative Disaster Management (3)
 PAD 5836 International and Comparative Administration (3)
 PAD 5837 International Terrorism Policy (3)
 PAD 5839 International Conflict and Terrorism (3)
 PAD 5849 U.S. Intelligence Policy (3)
 PAD 5885 Advanced Intelligence Analysis (3)
 PAD 5895 Homeland Security: Policy and Practice (3)
 PAD 5896 U.S. Intelligence Analysis and Communication (3)
 PAD 5898 Global Security and Fusion (3)

Religion

RLG 5195r Seminar: Religion and Culture (3)
 RLG 5305r Seminar: History of Religions (3)
 RLG 5332 Modern Hinduism (3)
 RLG 5354r Special Topics In Asian Religion (3)
 RLG 5562 Modern Roman Catholicism (3)
 RLG 5616 Modern Judaism (3)
 RLG 6176r Seminar: Ethics and Politics (3)*

*Students in international affairs should get permission of the instructor before registering for this course.

Sociology

SYA 5018 Classical Social Theory (3)
 SYD 5046 International Population Dynamics (3)
 SYD 5105 Population Theory (3)
 SYD 5135 Techniques of Population Analysis (3)
 SYD 5215 Health and Survival (3)
 SYD 5225 Fertility (3)
 SYO 5306 Political Sociology (3)
 SYO 5335 Sociology of Political Economy (3)

Urban and Regional Planning

URP 5272 Urban and Regional Information Systems (3)
 URP 5355 International Transportation Planning (3)
 URP 5405 River Basin Planning and Management (3)
 URP 5424 Sustainable Development Planning in the Americas (3)
 URP 5526 Healthy Cities, Healthy Communities (3)
 URP 5544 Gender and Development (3)
 URP 5610 Introduction to Development Planning (3)
 URP 5611 Strategies for Urban and Regional Development in Less Developed Countries (3)
 URP 5615 Infrastructure and Housing in Less Developed Countries (3)
 URP 5616 Project Planning in Developing Countries (3)
 URP 5847 Growth and Development of Cities (3)
 URP 5939 Special Topics in Urban and Regional Planning (3) [Economic Development Practicum]

Definition of Prefixes

INR—International Relations

INS—International Studies

Graduate Courses

INR 5012. Problems of Globalism (3). This is a core course for all international affairs graduate students providing background for a theoretical and practical understanding of globalization and the international organizations that are significant actors in this process.

INR 5906r. Directed Individual Study (1-6). (S/U grade only). Subject varies with each student. May be repeated to a maximum of twelve semester hours.

INR 5910r. Supervised Research (1-3). (S/U grade only). May be repeated to a maximum of five credit hours. Department approval required for more than three semester hours to apply to the master's degree. Subject varies with each student.

INR 5935r. Special Topics (1-3). (S/U grade only). Topics vary. May be repeated to a maximum of twelve semester hours as topics change.

INR 5936r. Special Topics in International Affairs (1-3). Topics vary. May be repeated to a maximum of eighteen semester hours.

INR 5938. Joint Seminar in International Affairs (3). Provides a core course for all majors in the interdepartmental master's program in international affairs. It is an introduction to references and research tools in international relations; disciplinary and interdisciplinary approaches, and basic concepts in the field.

INR 5971r. Thesis (1-6). (S/U grade only). Topic varies with student. A minimum of six semester hours of credit is required.

INR 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

INR 8976r. Master's Thesis Defense (0). (P/F grade only.)

INS 5906r. Directed Individual Study (1-6). The subject varies for each student. May be repeated to a maximum of twelve semester hours.

INS 5935. International Dialogue Seminar (3). This multi-disciplinary, graduate seminar is intended for students interested in acquiring the skills to become effective leaders in diverse cultural and organizational settings. Students from the U.S. and other nations share and integrate their personal and professional perspectives through class discussions, exercises and projects.

INTERNATIONAL/INTERCULTURAL DEVELOPMENT EDUCATION:

see Educational Leadership and Policy Studies

INTERNATIONAL RELATIONS: see Political Science

ITALIAN LANGUAGE, LITERATURE: see Modern Languages and Linguistics

JAPANESE: see Asian Studies; Modern Languages and Linguistics

JAZZ STUDIES: see Music

LANGUAGE ARTS AND ENGLISH EDUCATION: see English; Teacher Education

LATIN AMERICAN HISTORY: see History

LATIN: LANGUAGE STUDIES: see Classics

Graduate LAW

COLLEGE OF LAW

Website: <http://www.law.fsu.edu>

Professors: Atkinson, Bayern, Cahill, Hsu, Johnson, Kahn, Logan, Landau, Markell, O'Connor, Ryan, Seidenfeld, Stern, Utset, Weidner, Williams; Ziegler; **Associate Professors:** Eisenberg; Kesten, Lee, Linford, Sevier, Spottswood; **Assistant Professors:** Gentry, Morley, Scholz, Swan; **Edward Ball Eminent Scholar:** Abbott; **Teaching Faculty:** Annino, Benham, Blenkhorn, Busch, Krieger, LaVia, Laroche, Matthews, Powell, Quintela, Scott, Taylor; **Professors Emeriti:** Banoff, Christie, Dodge, Ehrhardt, Larson, Oeltjen, Powell, Schroeder, Southerland, Tesón, Van Doren, Vinson, Yetter

The College of Law provides students with a sophisticated legal education. The school encourages close working relationships among students and faculty; expert faculty members are accessible to students and teach them outside of the classroom as well as inside the classroom. Our faculty adds value by delivering a program of study that prepares students to enter the worlds of law, business, or government at the highest possible level. The College of Law inhabits a strong sense of community; students are proud of the law school and of one another.

For further details of degree requirements and for a description of the college and its opportunities, please visit <http://www.law.fsu.edu>.

Note: The following courses are required: LAW 5000, LAW 5100, LAW 5300, LAW 5400, LAW 5501, LAW 5502, LAW 5522, LAW 5700, LAW 5792, LAW 5793, and LAW 7750.

Definition of Prefix

LAW—Law

Graduate Courses

LAW 5000. Contracts (1-4). This course explores substantive and remedial aspects of business agreements including offer, acceptance, consideration, assignments, third-party beneficiaries, statute of frauds, legality, performance, and remedies.

LAW 5100. Criminal Law (3). This course examines substantive requirements of criminal law offenses and defenses, the social and political forces influencing the content of criminal law, as well as the constitutional limits and requirements informing its content and application.

LAW 5300. Civil Procedure (4). Jurisdiction of person, subject matter, and venue of federal and state courts; pleadings, complaints, answer, and reply; motion for judgment on pleadings and summary.

LAW 5400. Property (4). This course studies the extent to which various property rights come or fail to be recognized. The course includes both private sector and governmental arrangements and influences on the definition of property rights. Particular topics include the law of finders, landlord and tenant, concurrent ownership, licenses, easements, profits, restrictive covenants, an introduction to zoning and growth control, as well as constitutional "talkings" analysis.

LAW 5501. Constitutional Law I (3). Judicial function in constitutional cases, the federal system, powers delegated to national government, powers reserved to the states, due process of law, and fundamental individual rights.

LAW 5502. Constitutional Law II (3). Judicial function in constitutional cases, the federal system, powers delegated to national government, powers reserved to the states, due process of law, and fundamental individual rights.

LAW 5522. Legislation and Regulation (1-3). This course introduces students to creation, interpretation, and application of statutes and regulations, and explains the central role that they play in modern American governance.

LAW 5700. Torts (1-4). Civil liability for harm to persons and property, including intentional torts and privileges thereto; negligence, causation, and defenses; strict liability, products liability, defamation, privacy, and interference with advantageous relationships.

LAW 5792. Legal Writing and Research I (2). Use of law library, legal research techniques, and practical work in analyzing legal problems. Students meet in small sections to work on specific legal problems assigned to them.

LAW 5793. Legal Writing and Research II (2-3). Legal writing techniques, practical work in analyzing legal problems, preparation of an appellate brief, and the argument of an appellate case. Follows LAW 5792.

LAW 6002. Insurance Contracts (2-3). In this course, students study insurance contracts and insurance law. Topics covered include: the nature of insurance; insurable interests; persons and interests protected; contractual obligations of the insured and insurer; the claims process; bad faith; and subrogation. Students explore insurance contracts from the point of negotiation and execution through the claims process, settlement, and dispute resolution.

LAW 6010. Sales and Leases (2-3). Rights and responsibilities of sellers, buyers, lessors, and lessees of personal property under UCC Articles 2 and 2A; transactions in documents of title, bulk transfers, and letters of credit under UCC Articles 5, 6 and 7; United Nations Convention on the International Sale of Goods and other international law governing documents of title and letters of credit.

LAW 6030. Secured Transactions (2-3). Security interests in personal property; creation, perfection, priority, and enforcement security interests under UCC Article 9; effect of bankruptcy on secured transactions.

LAW 6032. Commercial Paper (2). This course examines the principles of commercial paper; system of bank deposits and collections, including the relationship of the commercial bank and its customer. The use of commercial paper in documentary exchanges is also covered.

LAW 6035. Commercial Law Survey (1-4). Basic introduction to and survey of the law of sales, leases, commercial paper, fund transfers, letters of credit and secured transaction under the Uniform Commercial Code.

LAW 6060. Corporations (4). This course focuses on general principles of law relating to agency and partnerships, followed by a more detailed study of the modern business corporation. Formation and structure of the corporation, powers, controls, and obligations of officers and directors, rights and liabilities of stockholders, rights of creditors, stockholders representative actions.

LAW 6062. Closely Held Business Organization (2-3). This course is a study of the basic principles of agency and partnership law, including limited partnerships, limited liability partnerships, and limited liability companies.

LAW 6073. Enterprise Risk Management: Business and Legal Perspectives (2-3). This course is an overview of enterprise risk management, which is a progressive approach to managing risk that recognizes the importance of risk from both negative (loss focused) and positive perspectives (value creation), as well as the critical nexus between the way risk is managed and organizational performance outcomes are implicated. Students understand the differences between traditional risk management and how and to where it evolved. The course explores the key components of enterprise risk management and how they relate to organizational success and failure. We significantly emphasize the relationship between risk and the legal landscape but also the general business landscape where, in effect, every decision involves some aspect of risk, and every risk could have legal implications. Students are exposed to the major sources of risk for organizations and the various ways different organizations and industries plan for and handle the variety of risk processes.

LAW 6075. Workplace Privacy and Cybersecurity (2-3). This course studies privacy and cybersecurity law within the context of employment relationships and HR compliance. Topics covered include legal and compliance issues arising with: interviews and background investigation; medical screening, testing, and Health Insurance Portability Act (HIPAA) issues; psychological screening and testing; drugs, alcohol, and tobacco screening and testing; monitoring of employee performance and conduct; monitoring of social media, emails, and telephone conversations; video surveillance; GPS tracking; reasonable expectation of privacy and searches and seizures; misuse of company computers and cybersecurity issues; Fair Credit Reporting Act; and Human Resources compliance best practices and employer liability issues.

LAW 6076. HR Documentation and Employee Policies and Procedures (3). This course covers the legal issues related to human resource documentation and employee policies and procedures. The course covers topics including: what actions to document and how and when to document them; document retention guidelines under various employment laws; privacy issues; and best practices and legal issues related to employee handbooks.

LAW 6080. Insurance Law (2-3). An overview of insurance theory and regulation with emphasis on recurring coverage litigation and interpretation of insurance contracts.

LAW 6083. Financial Privacy and Cybersecurity (2). This course studies privacy law, with a focus on the obligations of banks and other financial institutions regarding financial information and records and customer privacy, and introduces students to federal and state regulations on cybersecurity and cybercrime. The course covers the Financial Right to Privacy Act; Privacy of Consumer Financial Information Rule of the Gramm-Leach-Bliley Act; regulatory compliance requirements and risk management best practices; cyber risk management, governance, and audits; internal and external dependency management; and incident reports, cyber resilience, and situational awareness.

LAW 6092. Privacy and Cybersecurity Law (2). This course introduces students to privacy law and liability and federal and state regulations on cybersecurity and cybercrime. Topics include: safeguarding sensitive personal and corporate information against inadvertent disclosure; breach disclosure issues arising under cybersecurity law; privacy in the workplace; consumer privacy; emerging technologies that may affect security and privacy concerns; regulatory compliance requirements and risk management best practices; cyber risk management, governance, and audits; internal and external dependency management; and incident reports, cyber resilience, and situational awareness.

LAW 6093. Consumer Compliance: Deposits, New Products, and Operations (2-3). This course is a study of consumer compliance issues in the context of deposit-related products and services, new products, and operations. Topics covered include: Regulation CC (implementing the Expedited Funds Availability Act and the Check Clearing for the 21st Century Act); Regulation E (implementing the Electronic Fund Transfer Act); Regulation DD (implementing the Truth in Savings Act); Unfair, Deceptive, or Abusive Acts or Practices (UDAAP); Regulation V (implementing the Fair Credit Reporting Act); Regulation P (Gramm-Leach-Bliley Act financial privacy requirements). The course also covers relevant BSA (Bank Secrecy Act) and OFAC (Office of Foreign Assets Control) issues.

LAW 6094. Governance, Risk Management, and Compliance (2-3). This course introduces students to risk management and internal controls within business firms and financial institutions. The course covers topics including state fiduciary duties; the Sarbanes-Oxley Act; the Foreign Corrupt Practices Act; oversight by board of directors; relationship with creditors and shareholders; and disclosure requirements under Federal Securities Laws and under banking statutes and regulation.

LAW 6095. Compliance Failures: Investigation, Reporting, and Remediation (2-3). This course studies the obligations of regulated companies when there has been a compliance failure. The course covers: audits and other internal governance approaches for discovering compliance problems in a timely fashion; investigations; reporting; mitigation; regulatory responses; and remediation.

LAW 6260. Public International Law (3). Problems of jurisdiction on an international level with emphasis on the role of law in an orderly world society. Also examined is the status of individuals and associations operating across national and other territorial boundaries.

LAW 6261. International Business Transactions (3-4). Study of the structure of individual transnational business and commercial transactions.

LAW 6302. Federal Jurisdiction (3). Prerequisites: LAW 5501, 5502, 5300. Federal court system; examination of original and removal jurisdiction of United States District Courts; relationships between state and federal courts at all levels.

LAW 6305. Remedies (3). Prerequisites: LAW 5000, 5400. This course is a study of legal and equitable remedies and procedures available including compensation, restitution, exemplary damages, injunctive forms of relief, specific relief under various legal circumstances, such as reformation, rescission, and restitution.

LAW 6310. Alternative Dispute Resolution (2-3). Introduction to non-judicial mechanisms for the resolution of disputes, including interviewing and counseling, negotiation, mediation, and arbitration, and the development of basic ADR skills using role-playing exercises and simulations.

LAW 6312. Mediation (3). Introduction to mediation theory and practice and development of basic mediation skills using role-playing exercises and simulations.

LAW 6313. Negotiation (1-4). This course introduces the theory and practice of negotiation in a workshop setting. Students examine the basic stages of a negotiation; the major tensions at play in negotiation; distributive bargaining, value-creating, and problem-solving techniques; the management of communication and emotional elements in negotiation; power dynamics and ethics; and other topics as time allows. The course is designed to help students develop negotiating skills and a framework for ongoing self-learning through role-playing simulations, discussion, reading assignments, and regular journal and writing exercises.

LAW 6315. Arbitration (3). Basic introduction to the law and process of arbitration.

LAW 6330. Evidence (4). Prerequisite: LAW 5300. Rules of evidence developed by common law courts and legislatures; rules of evidence, federal and state; special emphasis on judicial notice, examination of witnesses, privilege and competency, constitutional provisions, relevancy, remote and prejudicial evidence, best evidence rule, opinion and expert testimony, hearsay rule and its exceptions, burden of proof and presumptions, judge and jury.

LAW 6420. Land Transfer (2-3). This course is a study of basic transactions in real property. Among the topics covered are the respective roles of lawyers and brokers in the conveying process, sales contracts, recording acts, title insurance, remedies for contract breach, and basic mortgage law.

LAW 6426. Real Estate Finance (3). Recommended: LAW 6600r. This course is designed to train students to analyze complex commercial real estate transactions. It is interdisciplinary within law, attempting to integrate topics including basic mortgage law, usury law, subordination agreements, mechanics lien law, selected uniform commercial code issues, choice of business entity, federal and state securities law and, importantly, federal income tax law. Condominiums and cooperatives are discussed as security devices. The federal income tax coverage concentrates on a handful of issues fundamental to commercial real estate transactions, especially the tax treatment of indebtedness and tax aspects of leasing arrangements, including synthetic lease transactions.

LAW 6430. Gratuitous Transfers (3-4). This course focuses on the law relating to administration of decedents estates; establishment and validity of private and charitable trusts; execution, revocation, validity, and construction of wills; class gifts; powers of appointment; future interests; and the Rule Against Perpetuities.

LAW 6460. Land Use Regulation (3). Prerequisite: LAW 5400. A study of land use and regulation, including zoning, public acquisition, various innovative land use controls, subdivision controls, growth management, wetlands and shorelands controls, and a discussion of the relationship between energy and land use.

LAW 6470. Environmental Law (3). A survey of environmental rights, remedies, and policy, with emphasis on the common law, background, the administrative overlay, and federal legislation, including NEPA, Clean Air Act, Water Pollution Control Act, Noise Control Act, and Toxic Substances Control Act.

LAW 6480r. Natural Resources Law (2-3). A survey of natural resources law, emphasizing water resources management and pollution control, wetlands regulation, and wildlife law. May be repeated to a maximum of five semester hours.

LAW 6516. Health Care Disability Law: Mental, Physical, and Age-Related (2-3). This course addresses vulnerable patient populations with mental, physical, and/or age-related disabilities, focusing especially on responses of the legal system to the relationship of those patients to the health care and broader service systems.

LAW 6520. Administrative Law (1-4). This course is a study of the legislative, executive and judicial control of administrative action.

LAW 6524. Statutory Interpretation (3). Statutory and quasi-statutory legal materials: their use and interpretation.

LAW 6529. Health Care Privacy and Cybersecurity (2-3). This course provides a study of privacy law and cybersecurity issues, with a focus on the obligations of health care providers, health care institutions, and health plans with respect to the protection of personal health care information. The course examines the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and security of health care information under state and federal law, including HIPAA, the Health Information Technology for Economic and Clinical Health (HITECH) Act, and breach notification requirements. The course also introduces issues related to emerging uses of technology, including telemedicine, as well as federal and state regulations on cybersecurity and cybercrime.

LAW 6530. Local Government Law (3). An examination of the powers, limitations, and special legal considerations concerning local governments. Special consideration is given Florida problems concerning county and municipal governing bodies.

LAW 6545. Employment Law Survey (3-4). Survey of basic legal and policy concepts governing the employment relationship.

LAW 6546. HR and Employment Law Research (2-3). This course is an introduction to legal sources relevant to human resources compliance and employment law. Student are introduced to basic concepts, sources, and legal research techniques used in human resources and legal risk management. Skills taught include efficiently researching secondary sources and regulations, agency documents, and problem analyses. Students also learn advanced research techniques.

LAW 6548. Employment Law for HR Compliance (2-3). This course provides a basic overview of employment law as it relates to day-to-day employment practices. Students are guided through the entire employer-employee relationship—from the initial decision to fill a position to the ultimate decision to terminate the employment relationship. The course also offers guidance on how employers can minimize their potential liability in the workplace.

LAW 6550. Antitrust Law (2-3). Introductory study of contemporary U.S. antitrust law and federal policy regarding regulatory control of the competitive process in the American economy.

LAW 6555. Law and Economics (3). Introduction to basic microeconomic principles necessary for lawyers to understand economic analysis as used in the legal literature and to use and evaluate legal arguments that rely on economic analysis.

LAW 6566. Financial Regulation Research (2-3). This course is an introduction to legal sources relevant to financial regulation. Students are introduced to basic concepts, sources, and legal research techniques used in financial legal risk management and regulatory compliance. Skills taught in this course include efficiently researching secondary sources and regulations, agency documents, and problem analyses. Students also learn about advanced research techniques.

LAW 6572r. Copyright Law (2-3). Survey of federal copyright law and closely related doctrines. A study of the Copyright Act, including protectable subject matter, scope of protection, remedies for infringement, and permissible use of copyrighted material. May be repeated to a maximum of five semester hours.

LAW 6541. Employee Benefits Law (2-3). The course provides an overview of the law governing employee benefits plans, including retirement plans (401(k) and pension plans) and welfare benefits plans (life, healthy, disability, long-term care and post-retirement medical). The course reviews the Employee Retirement Income Security Act (ERISA), the main federal law regulating employee benefit program, as well as rules governing coverage, vesting, funding, fiduciary standards, claims administration, remedies and preemption of state law.

LAW 6593. Health Care Regulation Research (2-3). This course introduces legal sources relevant to health care regulation. Students are introduced to basic concepts, sources, and legal research techniques used risk management and regulatory compliance. Students gain skills including efficiently researching secondary sources and regulations, agency documents, and problem analyses. Students also learn advanced research techniques.

LAW 6600r. Taxation I (3-4). A study of the fundamental concepts employed in federal income taxation, the public policies that underlie the current system, and the impact of the system on individuals and business entities. May be repeated to a maximum of seven semester hours.

LAW 6610. Corporate Tax (2-4). Prerequisite: LAW 6600. Federal corporate income taxation; techniques for distributing wealth from corporations without paying tax at two levels; special problems of corporate liquidations, mergers, and reorganizations.

LAW 6618. Taxation of Business Entities (3). This course introduces students to the federal income taxation of corporations, partnerships and limited liability companies. Topics covered will include choosing the appropriate entity, formation of the entity, operation and distribution, sales of interests, and liquidation. Tax-free reorganizations and other similar transactions will be covered in this course.

LAW 6620. Estate and Gift Tax (3). Introduction to federal taxation of estates and gifts.

LAW 6702r. Products Liability (2-3). A survey of the law of liability for product injuries, including litigation, product safety regulation, and alternative means of resolving injury claims. May be repeated to a maximum of five semester hours.

LAW 6705. Workers' Compensation (2-3). A study of the workers' compensation insurance system.

LAW 6720r. Health Law and Policy (2-3). A study of numerous topics including national health care programs, health care financing, reimbursement, licensing and accreditation, hospital organization, physician and patient autonomy, antitrust law, quality of care and medical malpractice, and ethical issues related to availability of health care and services. May be repeated to a maximum of five semester hours.

LAW 6721. Health Care Payer-Provider Relationships (2-3). This course studies the legal and contractual issues arising in health care payer-provider relationships, in the context of private payers. Special focus is given to best practices for compliance and contractual and legal risk management.

LAW 6725. Medical Malpractice (2-3). This course introduces students to the substantive, procedural, and policy aspects of the law pertaining to the initiation, litigation, and resolution of medical malpractice claims in the contemporary United States. Specific topics covered include, among others: structure of the treatment relationship; confidentiality; informed consent; medical errors and patient safety; physician and institutional liability (entailing theories of liability, affirmative defenses, damages, and settlement); and medical malpractice system reform (including discussion of economic, political, and cultural ramifications of the existing system and alternatives to it).

LAW 6729. Medicare, Medicaid, and Managed Care (2). This course introduces the legal issues associated with public and private health insurance and benefits plans. Students learn about federal and state financing programs, including Medicare and Medicaid/SCHIP, employer provided insurance, and federal and state regulations of private health insurance markets and managed care, including population care management, provider payment, quality and accountability, and cost-containment.

LAW 6750. Patent Law (2-3). This course is a survey of patent, trademark, and unfair competition law.

LAW 6766. Financial Statements Interpretations (2-3). This course provides students with the basic accounting principles necessary to understand, interpret, and analyze financial statements; formulate effective inquiries; and communicate intelligently with business and financial professionals and future clients. Students read and use information from real companies to analyze and interpret their financial statements. Real world examples are used to illustrate the interrelationships between financial statements and the documents underlying certain deals/transactions. Students learn about financial reports; cash flow versus income; tax versus accounting books; and the quality of earnings and analytical ratios, all of which may be necessary to conduct due diligence on a particular matter and to draft operative agreements. This course also analyzes past financial scandals and the financial issues that led to them (and the role various professionals could/may have played in preventing them).

LAW 6775. Workers' Compensation Law and Civil Liability (2). This course examines the legal rules covering the workers' compensation systems. The course covers topics including: agency concepts as they apply to employment relationships; compensable accidents and injuries; tort concepts; causation; the worker's compensation process, from injury to an employee's return to work; fraud; and civil liability issues.

LAW 6786. Introduction to Legal Studies and Research (1-4). This course introduces students to the American legal system, the study of law, and effective legal research techniques. This course provides students with practical, hands-on experience with legal resources and research tools. This course emphasizes building the practical research skills required to succeed in an increasingly complex legal and regulatory environment.

LAW 6794. Writing Skills (3). A workshop to develop and refine writing skills in legal contexts.

LAW 6852. Healthcare Fraud and Abuse (2-3). This course examines fraud and abuse in the delivery of healthcare through discussions of the criminal and civil laws that combat various forms of healthcare fraud. This course explores the essential features of the federal and state Anti-Kickback Laws, the federal physician self-referral law (Stark), the federal civil monetary penalty and exclusion laws, and the federal and state false claims acts. This course focuses on federal laws, but state law issues are also considered. The course considers voluntary and mandatory fraud and abuse compliance as well as the complexities and challenges that arise in developing and maintaining an effective compliance program.

LAW 6856. Regulatory Compliance (1-4). This course introduces basic statutes, regulation, and administrative practices relevant to regulatory compliance by business entities, financial institutions, and healthcare organizations and practitioners. The course also introduces students to basic concepts of risk management.

LAW 6863. Public Health Law (2-3). This course offers an overview of basic concepts and principles in public health law, examined in the context of issues such as government planning for natural and manmade disasters; mandatory immunization programs; mandatory medical screening of particular population groups; mandatory disease reporting laws; infectious disease control methods like quarantine; public health research; and regulation and litigation concerning tobacco, alcohol, firearms, and drugs with abuse potential. The course focuses on identification and analysis of the duties, powers, and limits of government in its pursuit of protecting and promoting the public's health.

LAW 6866. Bank Secrecy Act/Anti-Money Laundering Compliance (4). This course introduces students to Bank Secrecy Act and Anti-Money Laundering regulations and gives context to how processes for compliance with those requirements help financial institutions detect, prevent, investigate, and report financial crimes. The course studies statutory and regulatory requirements for record-keeping and reporting, sharing information with law enforcement and industry, and performing initial and ongoing due diligence over higher risk products, customers, and services.

LAW 6867. Consumer Compliance: Lending (2-3). This course covers consumer compliance issues faced by banks and other Financial Intermediaries. The course covers credit-related statutes and regulations, with special emphasis given to consumer protection, fair lending, fair housing, and community reinvestment laws. The course examines various other relevant legal regimes, including common law fraud, state unfair and deceptive acts and practices law, and Consumer Financial Protection Bureau regulations.

LAW 6870. Advanced Legal Research for Legal Risk Management and HR Compliance (2). This course introduced students to effective legal research techniques used in legal risk management and HR compliance in business entities. This course provides students with practical hands-on experience with legal resources and research tools. The course emphasizes building the practical research skills required to succeed in an increasingly complex legal and regulatory environment.

LAW 6871. Advanced Legal Research for Healthcare Regulation (2). This course introduces students to effective legal research techniques used in legal risk management and regulatory compliance in healthcare. This course provides students with practical hands-on experience with legal resources and research tools. This course emphasizes building the practical research skills required to succeed in an increasingly complex legal and regulatory environment.

LAW 6872. Risk Management for Financial Compliance (2-3). This course is a practical application demonstrating the manner in which compliance officers interact with "business owners" and regulators in order to properly risk-manage compliance requirements for banking institutions. The course introduces students to case studies that require various skills in order to resolve true banking compliance and legal issues. The course adds practical concepts for incorporating risk management into the world of regulatory compliance.

LAW 6873. Employment Discrimination Law (2-3). This course provides an analysis of major issues in the law of employment discrimination. The course introduces students to various statutes and executive orders governing employment discrimination on the basis of sex, race, age, religion, color, national origin, and sexual preference. The course places emphasis on the policy implications derived from case analysis.

LAW 6874. Business Organizations (2-3). In this course, students learn about the law of business organizations. The course introduces basic concepts of agency law, such as fiduciary duties, express and implied authority, and respondeat superior. The course examines how businesspeople choose between different types of business firms. The course examines a set of key legal concepts, including the formation of business entities, the role played by limited liability, abuses of the corporate form, the power and fiduciary responsibility of management, rights and liabilities of partners, LLC members, and shareholders.

LAW 6875. Broker-Dealer Regulation (2-3). This course provides an overview of the statutes and regulations governing broker-dealers. The course begins with a review of the foundational federal laws that regulate the securities industry and the sale of securities in the United States. The course covers topics such as broker-dealer registration, self-regulation, obligations of broker-dealers, and regulation of financial markets.

LAW 6876. Conducting Workplace Investigations (2-3). This course explains the major regulation governing the workplace and the legal and practical approaches to planning, conducting, and documenting internal workplace investigations of employee complaints and suspected employee misconduct.

LAW 6877. Drug Regulation and Compliance (2-3). This course provides an analysis of major legal issues in the pharmaceutical and medical device industries. The course explores the FDA's regulation of these industries, including the FDA approval process, advertising and promotional regulations, and enforcement by the FDA and other regulatory entities. Other topics include product liability and FDA preemption, research, patient care and privacy, pricing, and market access.

LAW 6878. Economic Sanctions (2-3). This course examines the economic sanctions laws administered by the U.S. Treasury Department's Office of Foreign Assets Control ("OFAC"). This course explores OFAC requirements for financial institutions' compliance programs, including risk assessment to identify high-risk areas and development of appropriate internal controls for screening and reporting. This course also considers OFAC examination of financial institutions' compliance programs, as well as OFAC enforcement actions.

LAW 6879. Vendors and Other Third Parties Risk Management (2-3). This course is a study of the legal issues related to outsourcing contracts, including liability issues arising from these relationships. The course provides an overview of risks and risk management considerations associated with outsourcing, as well as regulatory requirements and compliance best practices.

LAW 6991. Insurance and Risk Transfers (2). This course analyzes risk analysis and risk management within business firms, including a study of insurance and of other mechanisms used by firms to minimize, allocate, and transfer risks. Students learn about the legal and business sides of insurance and risk transfers.

LAW 6993. Advanced Legal Research – Financial Regulation (2). Prerequisite: LAW 6786. This course introduces students to effective legal research techniques used in Financial Regulation and Compliance. This course provides students with practical, hands-on experience with legal resources and research tools. This course emphasizes building the practical research skills required to succeed in an increasingly complex legal and regulatory environment.

LAW 6998. Consumer Protection Law (2). This two-credit hour course is an introduction to and survey of statutes and common-law doctrines protecting consumers in the American marketplace. Topics will include fraud, deceptive practices, predatory lending, equal access to credit, fair and accurate credit reporting, Truth-in-Lending law, fair debt collection, and enforcement of consumer rights.

LAW 7040. Consumer Law (2-3). Survey of the law of consumer protection.

LAW 7050. Creditors' Rights (3). Enforcement of attachments, garnishments, debtor's exemptions, fraudulent conveyances, and rights of debtors to be relieved of obligations; emphasis on bankruptcy jurisdiction, procedures, and administration.

LAW 7064. Corporate Finance (2-3). Prerequisite: LAW 6060. Advanced study of economic principles and legal rules pertaining to the public and private funding and restructuring of business corporations.

LAW 7111. Criminal Procedure - Police (2-3). Advanced study of selected federal constitutional constraints on the law enforcement evidence-gathering and investigative process.

LAW 7113. Criminal Procedure - Adjudication (2-3). Advanced study of selected federal constitutional constraints on the criminal justice adjudicatory process.

LAW 7116. Florida Criminal Procedure: Pre-Trial (2-3). Prerequisite: LAW 5100. Advanced study of selected issues regarding Florida criminal practice and procedure.

LAW 7210. Jurisprudence (1-4). A survey of contemporary jurisprudential thought.

LAW 7227. American Legal History I (2-3). Survey of early American legal history (circa 1600-1800), including the British background, the first state constitutions, the Articles of Confederation, the Constitutional Convention and ratification debates, and the adoption of the Bill of Rights. May also cover the development of the American judicial system and sources of early American law.

LAW 7228. American Legal History II (2-3). Survey of 19th century American legal history, including the Marshall Court, slave law, the impact of the Civil War and Reconstruction, Indian law, and the effects of industrialization.

LAW 7229. American Legal History III (2-3). Survey of modern American legal history (since 1890), including the erosion of private law, the rise of legal realism, and the development of judicial standards.

LAW 7233. Cyber Law (2-3). Introduction to legal issues regarding the Internet, including first amendment, privacy, tort liability, and copyright.

LAW 7246. Lawyers and Literature (2-3). Perspectives course using the perceptions of the novelist as a way of exploring the interactions of lawyers and the legal profession with the larger society.

LAW 7250. Comparative Law (2-3). A perspective course providing an introduction to the civil law tradition.

LAW 7262. International Trade (2-3). Advanced study of the law and policy of international trade and economic integration, with an emphasis on regional economic integration in the Americas.

LAW 7264. Immigration Law (2-3). Study of immigration law and national policy.

LAW 7266. International Litigation (2). Advanced study of international litigation for the resolution of private and public disputes.

LAW 7268. International Environmental Law (2-3). This is a problem-oriented course focusing on issues including marine pollution, transboundary movement of hazardous waste, climate change, biodiversity, the relation of population and the environment, and other global and transboundary environmental problems. This course is usually offered every other year.

LAW 7303. Florida Civil Practice (2). Prerequisites: LAW 5300, 6330. Florida practice from the commencement of action through final judgment; emphasis on Florida rules of civil procedure with preparation of materials for trial.

LAW 7307. Advanced Civil Procedure (2-3). Advanced study of selected topics regarding federal civil procedure, especially class actions and other multi-party litigation.

LAW 7340. Conflict of Laws (3). Law as it relates to transactions and relationships having elements in more than one jurisdiction.

LAW 7360. Trial Practice (2). (S/U grade only). Prerequisites: LAW 5300, 6330. Trial practice from the commencement of action through final judgment and postjudgment procedures. Emphasis on skills, technique, and tactics of a trial. Consent of instructor.

LAW 7370. Supreme Court Roleplay (2-3). Prerequisite: LAW 5501. This is a role-playing seminar in which students act as current United States Court Justices to decide three actual cases pending on the Court's docket after briefing and oral argument by student advocates.

LAW 7431. Estate Planning (2). Prerequisites: LAW 5400, 6430, 6620. This course focuses on donative arrangements for the disposition of property, including the income, estate, and gift tax consequences, and the effect of the law of future interests.

LAW 7475. Coastal and Ocean Law (2-3). Advanced study of property law, water and natural resources law, and constitutional law from the perspective of the special needs of the coasts and oceans.

LAW 7476. Law of the Sea (2-3). A study of the international law of the sea, including navigation rights, marine resources, and environmental problems.

LAW 7477. Environmental Issues in Business Transactions (2-3). A study of environmental issues arising in the context of business transactions such as real estate development and sales, leases, lending agreements, corporate mergers and acquisitions, and securities disclosure.

LAW 7481. Energy Law and Policy (2-3). Advanced study of current energy law and policy, including the extraction, conversion, and distribution of energy resources.

LAW 7482. Endangered Species Protection Law (2-3). Advanced study of the protection of at-risk species under the Endangered Species Act, and of contemporary law and policy regarding ecosystem management and biodiversity conservation.

LAW 7503. State Constitutional Law (3). General principles of constitutional law under the constitution of Florida. Judicial function in constitutional cases, powers of the branches of state government, local government powers, individual rights.

LAW 7510r. Civil Rights (2-3). Prerequisites: LAW 5501 and 5502. Focus on selected federal statutes enacted to remedy violations of federal constitutional rights. The principal Reconstruction Era Statutes, 42 U.S.C. Sections 1981, 1982, and 1983, are examined in depth. May be repeated to a maximum of five (5) semester hours.

LAW 7511r. First Amendment (2-3). Prerequisites: LAW 5501 and 5502. A study of First Amendment principles and their application in modern areas of communications practice. The course will develop theory, explore policy considerations, and expose students to parties that have participated in several significant media law cases. May be repeated to a maximum of five semester hours.

LAW 7512. Church and State (2-3). Prerequisites: LAW 5501, 5502. Advanced study of issues arising under both the Establishment and Free Exercise clauses of the U.S. Constitution.

LAW 7521. Florida Administrative Practice (2-3). Legislative and judicial control of state administrative action. Major emphasis is on the impact of the Florida Administrative Procedures Act on selected state agencies in their rulemaking and adjudicating functions.

LAW 7549. Employment Discrimination (3). Study of the various statutes and executive orders governing the employment relationship relating to discrimination on the basis of sex, race, age, religion, color, national origin, and sexual preference.

LAW 7560. Securities Regulation (3). Prerequisite: LAW 6060. Regulatory aspects of corporate finance, concentrating heavily on the fundamentals of the Securities Act of 1933 and the Securities Exchange Act of 1934.

LAW 7565. Securities Litigation Seminar (2). Prerequisite: LAW 6060. Advanced study of selected issues involving litigation under the federal or state securities laws.

LAW 7574. International Aspects of Intellectual Property (2-3). Advanced study of law and policy for the protection of intellectual property rights (IRPs) on an international basis, including framework created by various treaties and conventions.

LAW 7575. Entertainment Law (2-3). Advanced study of the law pertaining to the entertainment industry, with special emphasis on transactional planning.

LAW 7613. Taxation of Business Entities II (2-3). Prerequisites: LAW 6600, 6618. Advanced study of the federal income tax treatment of mergers, acquisitions, and other reorganizations and divisions involving corporations, partnerships and limited liability companies.

LAW 7660. Tax Policy (2). This seminar will evaluate topics such as the choice of a tax base (income or consumption), rate structure (flat or progressive), taxable unit (individual or family), and method of government spending (direct or through the tax system via tax expenditures) against the tax policy norms of equity, efficiency, and administrability to determine how well the present tax system satisfies these norms.

LAW 7680r. International Tax (2-3). Prerequisite: LAW 6600. A study of the federal income tax laws and international tax treaty provisions that apply to transactions that cross international boundaries. May be repeated to a maximum of five semester hours.

LAW 7704r. Mass Tort Litigation (2-3). An advanced study of the substantive law, complex procedures, and ethical issues of mass tort litigation. May be repeated to a maximum of five semester hours.

LAW 7710. Family Law (3). Legal relations and problems incident to the creation, preservation, and dissolution of the family unit. The course includes marital affairs and actions, adoption, child custody, and criminal and tortious conduct pertaining to domestic relations. Emphasis is placed on possible conflicts between the interests of the state in this area and the private interests of the individuals concerned.

LAW 7716. Florida Dissolution of Marriage (2-3). Advanced workshop on Florida marital dissolution law.

LAW 7722. Bioethics and the Law (3). Advanced study of law and values in health care and the biomedical sciences.

LAW 7730. Admiralty Law (2-3). Introduction to the law of the sea, including maritime jurisdiction.

LAW 7750. Professional Responsibility (3). A required course in satisfaction of the Florida Bar requirement for curricular study of the aspirational and disciplinary regulations of the integrated bar. Critical attention is given to the exclusionary and anticompetitive practices of the organized Bar, and to controversy over the deficiencies of various codes and formal (and informal) advisory opinions on professional behavior. The course is intended to furnish some insight into the customs and courtesies, sociology, and expectations of lawyers performing their various tasks in a variety of environments.

LAW 7760. Accounting and the Law (2-3). Study of accounting concepts and policies and their effect upon rules of law.

LAW 7840. Sports Law (2). Advanced study of state and federal laws relating to the business of amateur and professional sporting competition as entertainment.

LAW 7910r. Directed Individual Study (1-5). (S/U grade only). Prerequisites: Upper-division level and instructor permission. Independent research culminating in a quality paper written under supervision of a faculty member. May be repeated to a maximum of five semester hours.

LAW 7915r. Legislative Policy Studies (1-3). Individual research on assigned selected topics leading to the drafting of papers, policy statements, reports, and/or proposed legislation. May be repeated to a maximum of four semester hours.

LAW 7930r. College of Law Special Topics (1-4). This course considers special legal areas not included elsewhere in the curriculum. Credit is, and enrollment may be, determined by the instructor. May be repeated to a maximum of four (4) credit hours; repeatable within the same term.

LAW 7939r. Special Topics (2-3). (S/U grade only). This special topics course offers consideration of special legal areas not included elsewhere in the curriculum. May be repeated when content changes to a maximum of twenty-two semester hours.

LAW 7940r. Clinical Orientation (1-2). (S/U grade only). Prerequisite: Instructor permission. Introduction to the College of Law Clinical Programs, appellate brief writing, trial and appellate proceedings, and a review of applicable Florida practice and procedure.

LAW 7949r. Clinical Law Programs (1-15). (S/U grade only). Under the heading LAW 7949, the faculty offers several clinical programs (internships) to selected upper-class students. Enrollment is normally limited and may be competitive. Selection is determined by the several program element directors; these faculty members may impose special course prerequisites, grade point average requirements, and other selection criteria. These programs combine practical experience with scholarship and research. May be repeated within the same term to a maximum of thirty semester hours.

LAW 7950r. Law Review (1-5). (S/U grade only). Prerequisite: Upper-division level. Participation on the law review. Selection determined by directing professor. Upper-class students only. May be repeated within the same term to a maximum of twelve semester hours.

LAW 7951r. Moot Court Competition (1-3). (S/U grade only). Preparation for and participation in state, regional, and national moot court competition. Selection determined by directing professor. May be repeated within the same term to a maximum of three semester hours.

LEARNING AND COGNITION: see Educational Psychology and Learning Systems

Graduate Interdepartmental Minor in LINGUISTICS

Curriculum Committee: Brandl, Gonzalez, Lababidi, Leaser, Muntendam, Prantil, Qian, Reglero, Romanchuk, Soldat-Jaffe, Sunderman (Modern Languages and Linguistics)

Linguistics is concerned with the study of the nature of language. There are linguistic applications in the areas of anthropology, sociology, psychology, mathematics, computer sciences, philosophy, and audiology and speech pathology.

Graduate students who wish to minor in linguistics should choose a minor advisor from the members of the linguistics curriculum committee (listed above) to help them in designing courses of study that fill their personal and professional needs.

Requirements for a Minor in Linguistics

Graduate students in linguistics must take at least fifteen credit hours from the linguistics courses listed below; two of these **must** be core courses.

Note: Descriptions of the following courses can be found in the “Department of Modern Languages and Linguistics” chapter of this *Graduate Bulletin*.

Core Courses

LIN 5035, LIN 5045, LIN 5510

Other Courses

LIN 5908r, LIN 5932, LIN 5050, SPN 5776, SPN 5785, SPN 5795, SPN 5805, SPN 5845

Note: Additional courses may count with approval of the departmental curriculum committee.

LINGUISTICS:

see also Anthropology; Communication Disorders; English; Modern Languages and Linguistics

LITERATURE:

see English; Modern Languages and Linguistics

Graduate Department of MANAGEMENT

COLLEGE OF BUSINESS

Website: <https://business.fsu.edu/departments/management/>

Chair: David R. King; **Professors:** Douglas, Ferris, Fiorito, Hochwarter, Lamont, Perrewé, Stepina, Van Iddekinge; **Associate Professors:** Holmes, King, Maslach, Wang; **Assistant Professors:** Daniels, Paustian-Underdahl, Rousseau; **Senior Lecturers:** Blass, Diez-Arguelles, Trammell; **Associate Lecturer:** N/A; **Assistant Lecturers:** Brooks, Frazier, Hayes, Ryals, Shubrick; **Bank of America Professor:** Van Iddekinge; **Dean's Emerging Scholars:** Holmes, Maslach, Wang; **Entrepreneur in Residence:** N/A; **Francis Eppes Professor of Management:** Ferris; **Haywood & Betty Taylor Eminent Scholar in Business Administration:** Perrewé; **J. Frank Dame Professor of Management:** Fiorito; **Jim Moran Senior Lecturer and Executive Director, Jim Moran Institute:** Blass; **Jim Moran Professor of Business Administration:** Hochwarter; **Jim Moran Eminent Scholar of Business Administration:** Lamont; **Higdon Professor of Management:** King; **Center for Human Resource Management:** Brooks; **Professors Emeriti:** Anthony, Martinko, Voich, Wilkens

The Department of Management has a diversified faculty with a wide field of teaching and research specialties at the graduate level. These research areas include organizational behavior, human resources management, strategic management, entrepreneurship, leadership, labor relations, research methods, job stress, employee turnover, and training and development.

The graduate mission of the department is to provide education at both the master's and doctoral level and to stimulate and carry out research resulting in creation of new knowledge and its dissemination through scholarly publications. At the master's level, this teaching and research reflects a strongly applied focus with examination of the practices of various companies and other organizations. At the doctoral level, the focus is more analytical with emphasis on theory development and testing.

Doctoral Degree

The college offers a Doctor of Philosophy (PhD) in business administration. The management department offers two concentrations in the PhD program: 1) organizational behavior and human resources; and 2) strategy. The PhD program prepares students for teaching and research at the university level.

Graduates have been placed or currently hold faculty positions at major universities including Auburn University, Baylor University, Erasmus University (Netherlands), Florida Atlantic University, Georgia Southern University, Illinois State University, Iowa State University, James Madison University, Meliksah University (Turkey), Michigan State University, Mississippi State University, Northeastern University, Old Dominion University, Penn State University, Texas Christian University, Texas Tech University, University of Arkansas, University of Buffalo (SUNY Buffalo), University of Calgary, University of Colorado – Colorado Springs, University of Houston, University of New Hampshire, University of North Carolina at Charlotte, University of South Florida, University of Richmond, University of Tampa, University of Tennessee, West Virginia University, and Xavier University.

For additional information related to graduate Management programs, contact the Graduate Office, *College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110*, or via e-mail at gradprograms@business.fsu.edu.

Definition of Prefixes

GEB—General Business

MAN—Management

Graduate Courses

Master's

Note: The 5000-level courses are normally reserved exclusively for graduate students. No courses carrying both undergraduate and graduate credit are offered. Courses which may be repeated for credit are designated by “r” immediately following the course number.

GEB 5907r. Special Studies in Business (1–3). May be repeated to a maximum of three semester hours.

GEB 5944r. Graduate Internship (1–6). (S/U grade only). This internship offers a working and learning experience in the business industry. May be repeated to a maximum of six semester hours.

MAN 5037. Fundamentals of Management (3). This course is designed to enhance students' managerial and organizational skills by developing an understanding of the underlying theoretical and practical aspects of three domains of management: (1) strategic management, (2) organizational behavior (OB), and (3) human resource management (HRM). The course surveys various management topics that are categorized by individual, group, and organizational levels of analysis. Cannot be applied for credit for any graduate business degree.

MAN 5245. Organizational Behavior (3). This course offers a dynamic examination of managerial concepts of human behavior in work organizations.

MAN 5305. Personnel/Human Resource Management (3). Survey course covering strategic practices and problems in human resource management. Topics include job analysis, selection, training, compensation, and other employee rights.

MAN 5331. Compensation Management (3). This course exposes students to the conceptual elements, application of, and nature of organizational compensation programs. Students learn how compensation programs are designed and administered. Students gain practical knowledge of and skills in the field as well as an understanding of how the discipline connects to the broader field of organizational management.

MAN 5351. Training and Development (3). This course focuses on the important role that training and development plays in today's organizations. The course explores numerous strategies and methods used by organizations in a variety of industries and sectors to improve employee and organizational performance.

MAN 5365. Staffing (3). This course focuses on key issues in staffing employees in organizations. Students will gain an understanding of the relevance of staffing to today's organizations. The course covers theoretical and practical issues in areas such as job analysis, applicant recruitment/assessment/selection, and legal issues related to staffing.

MAN 5721. Strategy and Business Policy (1-4). Prerequisite: All other Master of Business Administration core courses. This course covers the relation between theories and practices of management, and focuses on utilizing methodologies and theories for strategic decision making.

MAN 5905r. Directed Individual Study (1-3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. Each course is repeatable up to three times.

MAN 5907r. Special Studies in Management (1-3). Prerequisite: Consent of associate dean for academic programs. Each course is repeatable up to three times.

MAN 5911r. Supervised Research (1-3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. For master's candidates only. A maximum of three hours may apply toward the master's degree. May be repeated to a maximum of five semester hours.

MAN 5935r. Special Topics in Management (1-3). In-depth study of current topics in management. May be repeated to a maximum of three times as topics vary.

MAN 5971r. Thesis (3-6). A minimum of six semester hours is required.

Doctoral

Note: The doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level. In exceptional cases master's candidates may elect 6000 level courses with permission of the instructor and the associate dean for academic programs.

GEB 6931r. Doctoral Issues in Professional Development (1-3). (S/U grade only.) This seminar focuses on a wide range of issues pertaining to careers as business scholars and provides a versatile vehicle to impart knowledge and build skill on issues in the field that typically are not covered in traditional Ph.D. content and methods seminars. Through reading assignments, discussion, simulations, and webcasts, students gain an appreciation for the many issues that will challenge them as they seek to build and manage a successful career in the business academics.

MAN 6235r. Doctoral Seminar in Organizational Theory (1-3). This course is a review of the literature and research in the field of organization theory. Emphasis is on both current and classical literature. May be repeated to a maximum of ten semester hours.

MAN 6275r. Organization Behavior I: Literature (3). A review of the literature and research in the field of organization behavior. Emphasis is on both current and classical literature.

MAN 6306. Doctoral Seminar in Human Resource Management (3). An advanced research seminar in human resources management. The scope and coverage of the seminar representatively reflect the important content areas in the field and the major theoretical and empirical contributions in each area.

MAN 6795r. Doctoral Seminar in Strategic Management: Selected Topics (3). This course involves a critical review of theory and research by introducing representative conceptual and empirical research in management.

MAN 6911r. Supervised Research (1-3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five semester hours.

MAN 6917. Doctoral Seminar in Management Research: Research Design (3). This course covers theory and hypothesis testing, measurement of constructs, publication strategies, and various special topics in empirical research.

MAN 6931. Strategy Microfoundations (3). This doctoral seminar in Strategy Microfoundations focuses on scholarly research that explains (1) why organizations behave as they do and (2) why some of them outperform others. The course focuses on theoretical and empirical contributions relevant to two large sub-streams of management research.

MAN 6932. Doctoral Seminar in Strategic Management I: Literature (3). This course covers the study of organizational strategies and policies of the literature and analysis of conceptual and empirical research issues in strategic management.

MAN 6933r. Doctoral Seminar in Organization Behavior: Special Topics (3). This course is an examination of special topics in organizational behavior. Topic changes from term to term. May be repeated to a maximum of six semester hours.

MAN 6934. Doctoral Seminar in Management Research: Data Analysis (3). Hands-on application of statistical tests utilizing computer packages to analyze various databases.

MAN 6941r. Supervised Teaching (1-3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five semester hours.

MAN 6979. Doctoral Seminar in Research (3). Focuses on the epistemological foundations of basic research methods in the organizational sciences such as observation, interviews, questionnaires, field experiments, and laboratory experiments.

MAN 6980r. Dissertation (1-12). (S/U grade only). A minimum of twenty-four semester hours is required.

MAN 8964r. Doctoral Preliminary Examination (0). (P/F grade only.)

MAN 8985r. Dissertation Defense Examination (0). (P/F grade only.)

MANAGEMENT:
see also *General Bulletin*; Entrepreneurship, Strategy and
Information Systems; Sport Management

MARINE BIOLOGY
see Biological Science

Graduate Department of MARKETING

COLLEGE OF BUSINESS

Website: <https://business.fsu.edu/departments/marketing>

Chair: Michael Brady; **Professors:** Brady, Cronin, Hartline, Hofacker, Kim, Lee, Scott; **Associate Professors:** Bolander, Bonney, Mende; **Assistant Professors:** Fajardo, Harmeling, Thomas; **Senior Lecturers in Marketing:** Dever, Kinney, Pallentino; **Associates in Marketing:** Hopkins; **Assistants in Marketing:** Ferguson, Jackson, Viosca; **John R. Kerr Research Chair in Marketing:** Cronin; **Bob Sasser Professor of Marketing:** Brady; **Carl DeSantis Professors of Business Administration:** Bolander, Hofacker; **Charles A. Bruning Professor of Business Administration:** Hartline; **Madeline Duncan Rolland Associate Professor of Business:** Scott

Relative to other marketing departments around the world, the FSU Department of Marketing is unique in terms of composition and focus. In addition to faculty in the traditional areas of marketing strategy and consumer behavior, the department also houses faculty in sales, public policy, and multinational business. The ability to leverage the synergies among these academic areas is a key competitive advantage and strength for the department. In addition, many of the marketing faculty (regardless of academic specialty) have a scholarly focus in services marketing. This is also a key strength of the department, in that a services focus coincides with the thrust of our national and state economies, virtually all of the placement opportunities for marketing graduates, and an established scholarly interest in the interdisciplinary nature of services.

Doctoral Degree

The College of Business offers the Doctor of Philosophy (PhD) in Business Administration. The Department of Marketing offers a concentration in marketing. The marketing doctoral program provides a solid foundation in the use of analytical and research tools applicable to marketing problems and a thorough understanding of modern marketing theory and applications.

The marketing faculty identifies and accepts doctoral students who are interested in and have the potential to pursue academic careers at leading universities and institutions throughout the world. It is the objective of the marketing faculty to provide students with the training and experience that will permit them to pursue these academic careers. The curriculum is designed to accomplish this objective. However, attainment of the objective requires that each student admitted to the doctoral program make a commitment to: 1) achieve a broad awareness of the various issues that constitute the field of marketing and an integrative understanding of their relationships, 2) develop abilities to design and conduct empirical research that is publishable in the leading journals of the student's primary interest area, and 3) maintain a tradition of scholarship and a professional commitment to excellence in teaching and instruction.

The prospective marketing doctoral student must meet college-wide admission standards and be recommended by the marketing faculty. Students plan their program in consultation with the marketing doctoral advisor and an advisory committee. The student must complete the courses in the marketing primary area, a support area, and the analytical and research tools area. The support area can be chosen from another area of business or from a non-business discipline such as economics, mathematics, communication, or statistics. Extensive student-faculty interaction is stressed throughout the program and culminates in the completion and defense of a dissertation under the guidance of the marketing faculty.

For additional information related to graduate Marketing programs, contact the Graduate Office, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110, or via e-mail at gradprograms@business.fsu.edu.

Definition of Prefixes

GEB—General Business

MAR—Marketing

Graduate Courses

Master's Courses

Note: The 5000 level courses are reserved exclusively for graduate students. No courses carrying both undergraduate and graduate credit are offered, except for students participating in the BS/MS Combined Program. Courses which may be repeated for credit are designated by "r" immediately following the course number.

GEB 5907r. Special Studies in Business (1–3). May be repeated to a maximum of three semester hours.

MAR 5028. Fundamentals of Marketing (3). This course introduces the student to the basics of marketing as a business discipline. It covers a wide variety of topics relevant to the task of managing resources to achieve marketing goals. Successful completion requires learning the vocabulary and concepts which characterize the marketing field and applying them to the development of a marketing strategy. Cannot be applied for credit for any graduate business degree.

MAR 5107. Business Ethics and Social Responsibility (3). This course focuses on the ethical responsibilities of companies toward all stakeholders in the marketing environment, including owners, employees, customers, and society. Includes a study of ethical decision making and how it overlaps with strategic and tactical decisions in both general and marketing.

MAR 5125. Marketing Strategy in the Global Environment (3). This course examines the business-level marketing strategy in the context of global markets and uses the marketing-planning process as a framework for understanding how global environments, markets, and institutions affect the strategic marketing operations of the global business enterprise.

MAR 5336. Strategic Corporate Communication (3). This course takes an integrated marketing communication approach to the structure and function of corporate communication and its role in managing a corporation's overall reputation. Specifically, this course examines strategic communication planning and how the corporation communicates with its various publics, including consumers, employees, investors, the media, government, and society at large. The course also addresses crisis avoidance and crisis communication planning.

MAR 5408. Sales Leadership (3). This course focuses on practical and theoretical issues associated with an array of sales leadership activities, including hiring salespeople, designing and implementing training programs, in-field coaching and development, motivating and compensating salespeople, and team building.

MAR 5409. Business-to-Business Sales and Marketing (3). This course focuses on building and managing relationships with business customers. It will cover business-to-business management issues, with an emphasis on topics at the mid-to-upper management level. Specific strategic marketing issues include problems and opportunities that leverage an understanding of the entire supply chain. Sales will deal primarily with complex, large/key account management and customer relations. Sales management issues will concentrate on managing a sales force focused on complex accounts.

MAR 5416. Strategic Sales Force Management (3). This course focuses on quantitative methods for data analysis and strategic decision making related to sales territory design, sales force organization, compensation plans, forecasting, and key account resource allocations.

MAR 5505. Consumer Behavior (3). Seminar focusing on theories of behavior and their relationship to marketing. Comprehensive analysis and interpretation of consumer behavior models. Also offered by the Department of Communication.

MAR 5625. Marketing Research and Analytics (3). This course focuses on the tools, techniques, and procedures involved in the marketing research process, as well as the critical thinking skills necessary to interpret marketing research findings. In addition, the course covers major analytical techniques that are used in a variety of research settings in both marketing and general business.

MAR 5675. Marketing Analytics (3). This course surveys the Marketing Analytics field, reducing the startup cost to using a wide variety of techniques needed by the practicing marketing scientist, and shows how marketing analytic techniques feed into the strategic marketing process and business decision-making in general.

MAR 5816. Marketing Strategy (3). Strategy applied to planning, analysis, and control; emphasis on individual situation analysis involving consumer needs, market position, competition, and public policy environment.

MAR 5818. Corporate Affairs Management (3). This course focuses on corporate affairs activities and the strategic use of these activities to market the organization, its issues, and its ideals to potential stakeholders (consumers, general public, shareholders, media, government, etc). Includes class presentations by corporate executives and extensive class discussion.

MAR 5849. Service Marketing Management (3). This course exposes students to a new way of thinking about marketing. No longer are manufacturing processes, defects per one-thousand, or logistics paramount. Services are different. The course discusses how they are different, why they are different, and what strategies result from these distinctions. The course covers why people are essential to service success, why expectations are important to service consumers, how the physical environment influences service delivery, and how services firms should recover from failure. Students also learn how quality is evaluated in service firms, why value is an essential deliverable, and what role loyalty has on the bottom line.

MAR 5861. Customer Relationship Management (3). This course emphasizes customers as arguably the single most important stakeholder of any modern corporation and focuses on strategies aimed at developing and maintaining enduring customer relationships. Management of customer relationships in concert with other key stakeholder relationships is also explored.

MAR 5907r. Directed Individual Study (1–3). (S/U grade only). Prerequisite: Permission from the associate dean for academic programs. May be repeated to a maximum of nine semester hours.

MAR 5908r. Special Studies in Management (1–3). Prerequisite: Permission from the associate dean for academic studies. May be repeated to a maximum of nine semester hours.

MAR 5935r. Special Topics in Marketing (1-3). In-depth study of current topics in marketing. May be repeated to a maximum of three times as topics vary.

MAR 5957r. Global Business Seminar (1-3). This course consists of on-campus class meetings and an international trip to an overseas destination. On campus meetings help students understand the related international business theories as well as the inhibiting and opportunity-offering roles of local cultures in international business. The international trip is to gain access to the best business practices of world-class multinational firms in the destination city. May be repeated to a maximum of six semester hours.

Doctoral Courses

Note: The doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level. In exceptional cases master's candidates may elect 6000 level courses with permission of the instructor and the associate dean for academic programs.

GEB 6904r. Readings for Examination (1-12). (S/U grade only). Prerequisite: All coursework required for the PhD. Designed for PhD students who have completed all of their required coursework and are preparing to sit for their preliminary examinations in the current semester. May be repeated to a maximum of twenty-four semester hours.

MAR 6506. Seminar in Consumer Behavior Methods (3). Prerequisite: Consent of Marketing doctoral program director. This course is an advanced doctoral seminar focused on learning procedures for designing and conducting experimental research.

MAR 6575. Seminar in Marketing: Selected Topics in Consumer Behavior (3). Prerequisite: Instructor permission. In-depth analysis of current selected topics in consumer information processing, attitudes, decision making, and social and cultural influences on consumer behavior.

MAR 6665. Seminar in Marketing Models (3). Prerequisite: Instructor permission. Examination of the applicability of modeling approaches within marketing contexts. Reviews of the modeling based literature forms the cornerstone of the class, with extensive discussion and analysis. doctoral standing and instructor permission are required for admission.

MAR 6817. Seminar in Marketing Management (3). Prerequisite: Instructor permission. Exploration of the conceptual foundations and research traditions of marketing research. Emphasis is placed upon reviewing the totality of research contexts and subject matters examined within the marketing discipline. The class format revolves around the critical review of appropriate journal articles. doctoral standing and instructor permission are required for admission.

MAR 6828. Seminar in Marketing: Elements and Integration of Marketing Strategy (3). Analysis of constraints and options when managing the major elements of marketing strategy, as well as optimizing opportunities, goals, and efficiency.

MAR 6918r. Supervised Research (1-3). (S/U grade only). Prerequisite: Permission from the associate dean for academic programs. May be repeated to a maximum of five semester hours.

MAR 6919r. Supervised Teaching (1-3). (S/U grade only). Prerequisite: Permission from the associate dean for academic programs. May be repeated to a maximum of five semester hours.

MAR 6979. Seminar in Marketing: Research Methodology (3). Prerequisite: Instructor permission. Course focuses on the strategies, theories, and concepts of the supply chain activities in both the business and the international markets.

MAR 6980r. Dissertation (1-12). (S/U grade only). A minimum of twenty-four semester hours is required.

MAR 8964r. Doctoral Preliminary Examination (0). (P/F grade only.)

MAR 8985r. Dissertation Defense Examination (0). (P/F grade only.)

Graduate MATERIALS SCIENCE AND ENGINEERING

THE GRADUATE SCHOOL

Website: <http://materials.fsu.edu>

Director: Eric Hellstrom

Materials Science and Engineering is an interdisciplinary graduate program that leads to the degrees of Master of Science (MS) and Doctor of Philosophy (PhD) in Materials Science and Engineering. Students interested in this program have a wide variety of backgrounds: engineering disciplines (including: biomedical, civil, chemical, computer, engineering physics, environmental, industrial, manufacturing, materials science, mechanical), applied mathematics, biology, chemistry, geology, and physics. Participating faculty hold appointments in Biological Science, Chemical and Biomedical Engineering, Chemistry and Biochemistry, Civil and Environmental Engineering, Electrical and Computer Engineering, Industrial and Manufacturing Engineering, Mechanical Engineering, Physics, and Scientific Computing.

The curriculum requires core and specialization courses, plus a thesis or dissertation. The core courses are designed to give students from the various disciplines a common background in materials. The courses for the degrees are taught within the participating departments.

Admission Requirements — MS and PhD

Students apply to Materials Science and Engineering through the program's Web site at <http://materials.fsu.edu>, where there are links to the online admission system for the Florida State University Office of Admissions. Complete applications including all supporting documents must be received by December 15th to be considered for financial aid for the following Fall semester. Applicants must meet the following minimum requirements:

- 3.0 undergraduate GPA (4.0 scale) as an upper-level undergraduate
- GRE scores of at least the 75th percentile for the Quantitative section and the 55th percentile for the Verbal section
- Three recent letters of recommendation from individuals who are able to assess the applicant's academic and research potential
- One set of official transcripts that is sent to the FSU Office of Admissions and one set of unofficial transcripts that is uploaded into the online application

International applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) examination and obtain a minimum score of 550 on the paper-based or 80 on the Internet-based TOEFL examination. International students expecting to receive appointments as teaching assistants are required to pass a test of spoken English administered by the FSU Center for Intensive English Studies (<http://cies.fsu.edu/>) when they arrive at Florida State University.

Degree Requirements — MS

Overall requirements for the degree of Master of Science in Materials Science and Engineering are:

- Admission to Materials Science and Engineering
- A minimum of thirty credits as follows:
 - Twelve credits of letter graded core courses - three required courses, one elective course
 - Twelve credits of letter graded specialization courses
 - Six credits of thesis research
 - Interdisciplinary seminar series all semesters
- Successfully present a research prospectus
- Complete research in materials science and engineering
- Submit and successfully defend an acceptable thesis

A list of the core and specialization courses can be found at <http://materials.fsu.edu>.

Degree Requirements — PhD

Overall requirements for the degree of Doctor of Philosophy in Materials Science and Engineering for students entering with a BS degree are:

- Admission to Materials Science and Engineering
- A minimum of fifty-four credits as follows:
 - Twelve credits of letter graded core courses - three required courses, one elective course
 - Fifteen credits of letter graded specialization courses (five specialization courses)
 - Twenty-four credits of dissertation research

- d. Interdisciplinary seminar series all semesters
3. Successfully pass a qualifying examination
4. Successfully pass a preliminary exam, which includes presenting and defending a prospectus
5. Complete research in materials science and engineering
6. Submit and successfully defend an acceptable dissertation

A list of the core and specialization courses can be found at <http://materials.fsu.edu>.

Definition of Prefix

ISC—Interdisciplinary Sciences

Graduate Courses

ISC 5905r. Directed Independent Study - MS&E (1–12). (S/U grade only). This course involves study on a selected topic as designated by the student and the directing professor. May be repeated to a maximum of fifty-four semester hours.

ISC 5937r. Interdisciplinary Seminar Series - MS&E (0). (S/U grade only). This course is a seminar series for Materials Science and Engineering students. It is required every Fall and Spring semester through graduation.

ISC 6970r. Thesis Research - MS&E (1–12). (S/U grade only). A minimum of six semester hours are required for the MS degree. May be repeated to a maximum of twenty-four semester hours.

ISC 6976r. Master's Thesis Defense - MS&E (0). (P/F grade only.) May be repeated with instructor permission.

ISC 8960r. PhD Preliminary Exam - MS&E (0). (P/F grade only.) May be repeated with instructor permission.

ISC 8980r. Dissertation Research - MS&E (1–12). (S/U grade only). A minimum of twenty-four semester hours are required for the PhD degree. May be repeated to a maximum of eighty-one semester hours.

ISC 8983r. PhD Dissertation Defense - MS&E (0). (P/F grade only.) May be repeated with instructor permission.

Graduate Department of MATHEMATICS

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.math.fsu.edu/>

Chair: Washington Mio; **Associate Chair:** Bellenot; **Associate Chair for Graduate Studies:** Ökten; **Director of Pure Mathematics:** Aldrovandi; **Director of Applied and Computational Mathematics:** Gallivan; **Interim Director of Financial Mathematics:** Ökten; **Director of Biomathematics:** Bertram; **Coordinator of Graduate Teaching Assistants:** Kirby; **Coordinator of Actuarial Science:** Paris; **Professors:** Aldrovandi, Aluffi, Bellenot, Bertram, Bowers, Cogan, S. Fenley, Gallivan, Heil, Huckaba, Hurdal, Hussaini, Kercheval, Klassen, Mio, Musslimani, Nolder, Ökten, Sussman, Tam, van Hoeij; **Associate Professors:** Agashe, Fahim, Kim, Magnan, R. Oberlin, Petersen; **Assistant Professors:** Ballas, Bao, Bauer, Ekren, Farhat, Foster, Jain, Lee, Moore, Needham, Reznikov, Zhu; **Courtesy Professors:** Absil, Beaumont, Chen, Croicu, le Dimet, Erlebacher, M. Fenley, Fusaro, Gan, Gunzburger, Marcolli, Mascagni, Mathelin, Moorer, Navon, Peterson, Tabak, Tang, van Dooren, Xiaoqiang Wang; **Professors Emeriti:** Blumsack, Bryant, Case, Gilmer, Hironaka, Kopriva, Kreimer, Mesterton-Gibbons, Mott, Nichols, D. Oberlin, Quine, Sumners, Wright

The Department of Mathematics is strongly committed to graduate education and research and offers programs of study leading to both the master's (MA and MS) and the doctoral (PhD) degrees. Its programs are designed to prepare students for mathematical careers in the academic, corporate, and governmental sectors. PhD and master's degrees are offered with concentrations in four areas: Pure Mathematics, Applied and Computational Mathematics, Financial Mathematics, and Biomathematics. For more information, please visit <http://www.math.fsu.edu>.

The department has cooperative relationships with science, social science, business, and engineering departments; the College of Medicine; and many institutes and laboratories on campus including: the Geophysical Fluid Dynamics Institute, the Laboratory of Imaging Studies, the Institute for Molecular Biophysics, the National High Magnetic Field Laboratory, the Program in Neuroscience, and the Department of Scientific Computing. Aside from a wide array of beginning and advanced courses in graduate mathematics, students may take advantage of approved courses outside the department. These include courses in biochemistry, computer science, economics, engineering, finance, molecular biology and biophysics, physics, risk management, and statistics. Flexible master's programs may be designed to suit the career goals of individual students. Financial Mathematics students may broaden their employment opportunities by pursuing a concentration in actuarial science. Students participate in the weekly colloquia; they also rotate responsibility for running a graduate-student seminar, where they discuss and critique their work and invite speakers to broadly address professional development. They may attend any subset of over a dozen seminar series whose topics vary according to the current research interests of the department.

The faculty of the department includes a Robert O. Lawton Distinguished Professor, an Eminent Scholar Chair in High Performance Computing, the Carol M. Brennen Professorship, the Christopher Hunter Professorship, the Dwight B. Goodner Professorship, three Distinguished Research Professors, three recipients of Developing Scholar Awards, and more than a dozen recipients of University Teaching and Advising Awards.

The four study areas give opportunities for graduate student and faculty interaction. The resulting research, publication, and recognition is in a variety of specializations including: algebraic geometry, arithmetic geometry, biofilms, biomathematics, collegiate mathematics education, complex analysis, computational anatomy and pattern analysis, complex dynamical systems, computational acoustics, computational neuroscience, conformal mapping, cryptography, econophysics, dynamical systems, financial mathematics and computational finance, fluid dynamics, game theory, geometric topology, harmonic analysis, high performance computing, homological algebra, homotopy theory, human brain mapping, knotting of DNA, mathematical economics, mathematical physics, mathematics history and biography, number theory, numerical analysis, partial differential equations, pattern recognition, physiology, protein geometry, shape theory, stochastic analysis, and symbolic computation. Faculty and graduate students are supported in their work by FSU research initiatives and by outside agencies including: Air Force Office of Scientific Research, American Heart Association, the Boeing Company, Goodrich Aerostructures, the Institute for Applied Mathematics (Minnesota), Mathematical Biosciences Institute (Ohio State), National Aeronautics and Space Administration, National Institutes of Health, National Mathematics and Science Initiative, National Security Agency, National Science Foundation, Ohio Aerospace Institute, Simons Foundation, and the U.S. Department of Education.

The Department of Mathematics has a full range of computing facilities available for a variety of instructional and research needs. Faculty and graduate students share high-performance workstations and file and computer servers. Across the university, students and faculty have access to a variety of state-of-the-art machines, including supercomputers and compute clusters. Florida State University provides a nearly campus-wide outdoor wi-fi network as well as indoor wireless in the libraries, the union, and the university student computer labs. As a member of the Florida Lambda Rail, FSU has multiple high-capacity backbones to other research universities and laboratories. The Library provides access to a number of databases (including Mathematical Reviews, MathSciNet, and JSTOR), an increasing number of eJournals (such as SIAM Journals and Springer LINK), as well as books, journals, and carrels for study.

Graduate Requirements

There are both University- and college-wide degree requirements that apply to all graduate students; these are summarized in the appropriate chapters of this *Graduate Bulletin*. Post-publication revisions to the degree guidelines and the course information listed below are available at <http://www.math.fsu.edu>, or at the Department's main office; students are alerted to changes or modifications by e-mail.

A number of graduate students receive support through fellowships or by working as teaching or research assistants. Graduate students in mathematics are strongly encouraged to include teaching skills as part of their professional-development activities. The department's recognized orientation and training programs accompany practice in several instructional delivery modes. Teaching Assistants participate in lecture-recitation delivery in computer classrooms and progress to full classroom responsibility. They are encouraged to investigate academic and research careers and are well prepared for teaching employment at various types of colleges and universities.

In order to obtain final graduation clearance from the Department of Mathematics, all MS and PhD candidates must complete an exit survey in their final semester. Additionally, PhD candidates must complete the information required for the national "Doctorates Granted" survey.

Master's (MA or MS) Degree

The department offers master's degrees in Pure Mathematics, Applied and Computational Mathematics, Financial Mathematics, and Biomathematics. Each area has its own required and approved elective courses and seminars. No 4000-level course in this department may count toward the master's degree. The student should consult the graduate programs' websites to learn more about the specific requirements for each area.

A course-type master's degree is available in all four areas and requires thirty-five or thirty-six hours of graduate courses. In Pure Mathematics, Applied and Computational Mathematics, and Biomathematics, at least thirty of thirty-six hours must be letter-graded. In Financial Mathematics, at least thirty-three of thirty-five hours must be letter-graded. Certain seminars must be taken in Financial Mathematics and Biomathematics; consult the area websites for details.

In Pure Mathematics and Applied and Computational Mathematics, a thesis-type master's degree is also available. The thesis-type master's degree requires at least thirty hours of letter-graded graduate courses, and six semester hours in MAT 5971r and appropriate thesis defense.

- A. **Pure Mathematics.** The pure mathematics option gives the student a well-rounded exposure to the foundations of modern mathematics. Coursework includes graduate sequences in algebra, real and complex analysis, and topology. Electives include more advanced courses in these disciplines as well as applied topics such as symbolic computation and statistics. The master's degree in pure mathematics provides excellent preparation for many careers in education, industry, and government. It is also an appropriate first step for those students who wish to pursue a PhD, either in some mathematical field or in another discipline that uses mathematics or rigorous logical thinking.
- B. **Applied and Computational Mathematics.** This option provides students with extensive research and educational experiences in modeling, analysis, algorithm development, and simulation for problems arising throughout mathematics, sciences, and engineering. After completing this master's degree, students may choose to pursue a doctoral degree in the area of Applied and Computational Mathematics or related areas, or pursue educational, financial, industrial, or governmental jobs involving applications of mathematical and computational skills.
- C. **Financial Mathematics.** This interdisciplinary degree program includes coursework in several departments and prepares students for work as quantitative analysts in financial firms, as actuaries, or for further doctoral study in quantitative finance. The degree includes a

professional component oriented to skills needed for financial industry employment. Students are encouraged to pursue summer internships in the financial industry.

- D. **Biomathematics.** Studies in this interdisciplinary program include courses in biomathematics and various biomathematics seminars. It also includes supporting courses from statistics, biological science, chemistry, computer science, and scientific computing. This course of study prepares students for careers in computational biology and the biological applications of mathematics.

Doctor of Philosophy (PhD) Degree

The PhD degree indicates knowledge of mathematics and a demonstrated capacity to do original, independent scholarly investigation. Early in the doctoral program, the student will complete major concentration-area course requirements or their equivalents (including courses required for the area MS degree) and will arrange a major professor or co-director within the department to direct the doctoral research. Three to six additional members complete the supervisory committee so that it is mutually agreeable to the student, the major professor or co-director, and the department chair. The supervisory committee must include three or more graduate faculty members of the department as well as a University Representative appropriately drawn from outside the department. The student then satisfies the area, department, and university requirements for doctoral candidacy (MAT 8964) and writes and defends a dissertation of original and independent research. The candidate, the major professor or co-directors, two other supervisory committee members from mathematics, and the University Representative are expected to be physically present at the dissertation defense. Consensus of the supervisory committee is necessary for a pass of the dissertation defense.

Studies leading to the PhD are available in Pure Mathematics, Applied and Computational Mathematics, Financial Mathematics, and Biomathematics. Each area of study specifies its own course requirements. The PhD qualification and candidacy examinations together comprise the preliminary examination, MAT 8964. Course requirements are chosen to provide the student with a strong basis for research. Standard foundational material is covered in the 5000-level courses with more advanced material in topics courses and seminars. Some of the required courses may be offered by other departments. The student will be expected to actively participate in at least one of the seminar series offered by the department and to regularly attend the weekly mathematics colloquium.

The doctoral student in mathematics can be required by his/her supervisory committee to demonstrate proficiency in a minor; normally this is accomplished by completing six or more semester hours in an approved mathematics-related subject with a grade point average (GPA) of at least 3.0. At the discretion of the student's supervisory committee, the student may be required to demonstrate competence in research tools appropriate to the student's program of studies. Such tools may include a reading knowledge of one or more foreign languages, technological skills, a minor, or other competencies.

After the student is admitted to doctoral candidacy, the writing of a dissertation becomes the major concern, although further coursework is usually required. The University's residency requirement must be satisfied. After admission to candidacy the student must register for at least twenty-four hours of dissertation credit (MAT 6980) and also register and participate in the appropriate research seminar for a minimum of three semesters, as well as the mathematics colloquium for a minimum of two semesters. It is a University requirement that the defense of dissertation must be held within five years from the time the student is admitted to doctoral candidacy; if this time limit is not met, the student may be required to repeat the qualifying or candidacy examination.

Definition of Prefixes

- MAA—Mathematics: Analysis
- MAD—Mathematics: Discrete
- MAP—Mathematics Applied
- MAS—Mathematics: Algebraic Structures
- MAT—Mathematics
- MHF—Mathematics: History and Foundations
- MTG—Mathematics: Topology and Geometry
- OCP—Physical Oceanography

Prerequisite Courses

Note: Please refer to the *General Bulletin* for full course descriptions.

- MAA 4226 Advanced Calculus I (3)
- MAA 4227 Advanced Calculus II (3)

- MAA 4402** Complex Variables (3)
MAC 2312 Calculus with Analytic Geometry II (4)
MAC 2313 Calculus with Analytic Geometry III (5)
MAD 3703 Numerical Analysis I (3)
MAP 2302 Ordinary Differential Equations (3)
MAP 3305 Engineering Mathematics I (3)
MAP 3306 Engineering Mathematics II (3)
MAP 4153 Vector Calculus with Introduction to Tensors (3)
MAP 4170 Introduction to Actuarial Mathematics (4)
MAP 4341 Elementary Partial Differential Equations I (3)
MAP 4342 Elementary Partial Differential Equations II (3)
MAS 3105 Applied Linear Algebra I (4)
MAS 4302 Introduction to Abstract Algebra I (3)
MAS 4303 Introduction to Abstract Algebra II (3)
PHY 2048C General Physics [for Physical Sciences] (5)
STA 4321 Introduction to Mathematical Statistics (3)

Graduate Courses

Note: Prerequisites are stated by number from the above list of FSU courses. The equivalent course at another institution as agreed by or consent of the instructor is sufficient.

- MAA 5306. Advanced Calculus I (3).** Prerequisites: MAC 2313; MAS 3105. Functions, sequences, limits, continuity, uniform continuity; differentiation; integration; convergence, uniform convergence.
- MAA 5307. Advanced Calculus II (3).** Prerequisite: MAA 5306. Continuation of MAA 5306.
- MAA 5406. Theory of Functions of a Complex Variable I (3).** Prerequisite: MAA 4227 or 5307; alternatively MAA 4226 and 4402. Algebra and geometry of complex numbers; elementary functions and their mappings. Analytic functions; integration in the complex plane; Cauchy's integral theorem and related theorems. Representation theorems including the Taylor and Laurent expansions. Calculus of residues. Entire and meromorphic functions.
- MAA 5407. Theory of Functions of a Complex Variable II (3).** Prerequisite: MAA 5406. Continuation of MAA 5406.
- MAA 5616. Measure and Integration I (3).** Prerequisite: MAA 4227 or 5307. Lebesgue measure and integration; Banach spaces of integrable functions; abstract measure and integration.
- MAA 5617. Measure and Integration II (3).** Prerequisite: MAA 5616. Continuation of MAA 5616.
- MAA 5932r. Topics in Analysis (1–3).** Prerequisite: Instructor permission. May be repeated to a maximum of twelve semester hours.
- MAA 6416r. Advanced Topics in Analysis (3).** May be repeated to a maximum of twelve semester hours.
- MAA 6939r. Advanced Seminar in Analysis (1).** (S/U grade only). May be repeated to a maximum of twelve semester hours.
- MAD 5305. Graph Theory (3).** Prerequisite: Graduate standing (for majors) or department approval (for non-majors). Graphs and digraphs, trees and connectivity, Euler and Hamilton tours, colorings, matchings, planarity and Ramseys theorem, applications. A proof-oriented course that assumes no previous exposure to graph theory but assumes a certain level of mathematical maturity.
- MAD 5306. Graph Theory and Networks (3).** Prerequisite: MAS 3105. This course provides the mathematical tools necessary to analyze abstract and real-life networks. Topics include the mathematical representation of networks, various forms of network centrality, the structure of real-life networks, and random networks.
- MAD 5403. Foundations of Computational Mathematics I (3).** Prerequisites: MAS 3105; competence in a programming language suitable for numeric computation. Analysis and implementation of numerical algorithms. Matrix analysis, conditioning, errors, direct and iterative solution of linear systems, rootfinding, systems of nonlinear equations, numerical optimization.
- MAD 5404. Foundations of Computational Mathematics II (3).** Prerequisite: MAD 5403. Interpolation, quadrature, approximation theory, numerical methods for ordinary differential equations and partial differential equations.
- MAD 5420. Numerical Optimization (3).** Prerequisites: MAC 2313; MAS 3105; C, C++, or Fortran. Unconstrained minimization: one-dimensional, multivariate, including steepest-descent, Newtons method, Quasi-Newton methods, conjugate-gradient methods, and relevant theoretical convergence theorems. Constrained minimization: Kuhn-Tucker theorems, penalty and barrier methods, duality, and augmented Lagrangian methods. Introduction to global minimization.
- MAD 5427. Numerical Optimal Control of Partial Differential Equations (3).** Prerequisites: MAD 5739; MAS 3105. Euler Lagrange equations, adjoint method algorithm. Optimal control of systems governed by elliptic, parabolic, hyperbolic PDEs. Control of initial and boundary conditions. Adjoint sensitivity analysis. Optimal parameter estimation, Kalman filter for parameter identification. Automatic differentiation techniques.

- MAD 5738. Numerical Solution of Partial Differential Equations I (3).** Prerequisites: MAD 5404; MAP 4342 or 5346. Finite difference methods for parabolic, elliptic, and hyperbolic problems; consistency, convergence, stability.
- MAD 5739. Numerical Solution of Partial Differential Equations II (3).** Prerequisite: MAD 5738. Continuation of MAD 5738.
- MAD 5745. Spectral Methods for Partial Differential Equations (3).** Prerequisites: MAD 5738; MAP 5431 (recommended). Fourier and orthogonal polynomial spectral methods for the solution of elliptic, parabolic, and hyperbolic equations. Spectral approximation theory. Pseudospectral method and aliasing removal. Applications to fluid flow.
- MAD 5932r. Topics in Computational Mathematics (1–3).** Prerequisite: Instructor permission. May be repeated to a maximum of twelve semester hours.
- MAD 6408r. Advanced Topics in Numerical Analysis (3).** May be repeated to a maximum of twelve semester hours.
- MAD 6939r. Advanced Seminar in Scientific Computing (1).** (S/U grade only). May be repeated to a maximum of twelve semester hours.
- MAP 5107. Mathematical Modeling (3).** Prerequisites: MAD 5404; MAP 5431, 5345. Formulation and application of mathematical models for problems arising in the natural sciences, engineering, economics, and industry. Related mathematical topics, including dimensional analysis and scaling, role of dimensionless numbers, perturbation methods, self-similar solutions, traveling waves and solitons, symmetry and symmetry breaking, bifurcations, inverse problems and regularization techniques.
- MAP 5165. Methods of Applied Mathematics I (3).** Prerequisites: MAP 2302, MAC 2313, and MAS 3105. Continuous and discrete models from physics, chemistry, biology, and engineering are analyzed using perturbation methods, analytical and geometrical tools and dynamical systems theory.
- MAP 5177. Actuarial Models (3).** Prerequisites: MAP 4170; STA 4321. Survival models; life probabilities; tables, mortality laws; contingent payment models; life annuities; premium principles and net premium reserves for continuous, discrete and semi-continuous life insurances, multiple life models, multiple decrement theory (theory of competing risks) and applications to pension plans, pricing and nonforfeiture models.
- MAP 5178. Advanced Actuarial Models, Credibility, and Simulation (3).** Prerequisite: MAP 5177. This course examines claim frequency models, individual loss models, aggregate loss models, multiple-life and multiple-decrement survival models, multiple-state transition models, credibility theory, and simulation.
- MAP 5207. Optimization (3).** Prerequisites: MAC 2313; MAD 3703; MAS 3105. Linear programming, unconstrained optimization, searching strategies, equality and inequality constrained problems.
- MAP 5217. Calculus of Variations (3).** Prerequisites: MAP 2302; MAA 5306 or MAP 5207. Fundamental problems, weak and strong extrema, necessary and sufficient conditions, Hamilton-Jacobi theory, dynamic programming, control theory, and Pontryagin's maximum principle.
- MAP 5345. Elementary Partial Differential Equations I (3).** Prerequisites: MAC 2313; MAP 2302 or 3305. Separation of variables; Fourier series; Sturm-Liouville problems; multidimensional initial boundary value problems; nonhomogeneous problems; Bessel functions and Legendre polynomials.
- MAP 5346. Elementary Partial Differential Equations II (3).** Prerequisite: MAP 5345; alternatively MAP 4341 and 4342 or instructor permission. Solution of first order quasi-linear partial differential equations; classification and reduction to normal form of linear second order equations; Greens function; infinite domain problems; the wave equation; radiation condition; spherical harmonics.
- MAP 5395. Finite Element Methods (3).** Prerequisites: MAD 5738 and, C++ or Fortran. Methods of weighted residuals, finite element analysis of one and two-dimensional problems, isoparametric elements, time dependent problems, algorithms for parabolic and hyperbolic problems, applications, advanced Galerkin techniques.
- MAP 5423. Complex Variables, Asymptotic Expansions, and Integral Transforms (3).** Prerequisites: MAP 4341 or 5345; MAA 4402 or 5406. Ordinary differential equations in the complex plane; special functions. Asymptotic methods: Laplaces method, steepest descent, stationary phase, WKB. Integral transforms: Fourier, Laplace, Hankel.
- MAP 5431. Introduction to Fluid Dynamics (3).** Prerequisites: MAP 4153; MAP 4341 or Corequisite MAP 5345; PHY 2048C. Physical properties of viscous fluids, hydrostatics, kinematics of slow fields, governing equations. Boussinesq approximation, Buckingham Pi theorem. Dynamics of viscous incompressible fluids: vorticity, boundary layer flow, similarity.
- MAP 5441. Perturbation Theory (3).** Prerequisite: MAP 4342 or 5346. Regular and singular perturbation problems; methods of averaging, matched asymptotic expansions, multiple scales, strained coordinates, and WKBJ; applications to ordinary and partial differential equations and fluid dynamics.
- MAP 5486. Computational Methods in Biology (3).** This course introduces biological topics where mathematical and computational methods are applicable, including discrete and continuous models of biological systems, numerical methods for differential equations, nonlinear differential equations, and stochastic methods.
- MAP 5513. Wave Propagation Theory (3).** Prerequisites: MAP 4342 or 5346; MAP 5431. Phase and group velocities, dispersion, reflection, characteristics, shock formation, momentum and energy transport, and nonlinear effects. Applications such as acoustics, water waves, internal waves, Rossby waves, and seismic waves. The Korteweg-DeVries equation and solutions.

MAP 5601. Introduction to Financial Mathematics (3). Prerequisites: MAC 2313; MAP 2302 or 3305; MAS 3105; STA 4321. Partial differential equations, Brownian motion, Black-Scholes analysis, introduction to measure and probability; financial applications.

MAP 5611. Introduction to Computational Finance (3). Prerequisites: MAP 5601; C, C++ or appropriate computer language. Computational methods for solving mathematical problems in finance: basic numerical methods, numerical solution of parabolic partial differential equations, including convergence and stability, solution of the Black-Scholes equation, boundary conditions for American options and binomial and random walk methods.

MAP 5615. Monte Carlo Methods in Financial Mathematics (3). Prerequisites: MAP 5601 and competence in a programming language for scientific computing. This course examines how the theory of Monte Carlo Methods is developed in the context of topics selected from computational finance, such as pricing exotic derivatives, American option pricing, and estimating sensitivities. The theory includes pseudorandom numbers, generation of random variables, variance reduction techniques, low-discrepancy sequences, and randomized quasi-Monte Carlo methods.

MAP 5932r. Topics in Applied Mathematics (1–3). Prerequisite: Instructor permission. May be repeated to a maximum of twelve semester hours.

MAP 6437r. Advanced Topics in Applied Mathematics (3). May be repeated to a maximum of twelve semester hours.

MAP 6621. Financial Engineering I (3). Prerequisites: FIN 5515, MAP 5601, 5611 (Recommended: STA 5807). A quantitative treatment of core problems in the investment industry. Topics include an analysis of active portfolio management including risk factor models and mean-variance optimization, the Martingale approach to derivative pricing for both discrete and continuous models, applied stochastic calculus, and stochastic interest rate models.

MAP 6939r. Advanced Seminar in Applied Mathematics (1). (S/U grade only). May be repeated to a maximum of twelve semester hours.

MAS 5307. Groups, Rings, and Vector Spaces I (3). Prerequisites: MAS 3105, 4302. Quotient groups, group mappings; permutation groups, Sylows theorem. Ring homomorphisms, ideals, quotient rings; fields; extension fields. Vector spaces; dual spaces. Algebra of linear transformations; theory of linear transformations.

MAS 5308. Groups, Rings, and Vector Spaces II (3). Prerequisite: MAS 5307. Continuation of MAS 5307.

MAS 5311. Abstract Algebra I (3). Prerequisite: MAS 5308. Groups, group mappings; direct products, linear algebras; rings and ring mappings; extensions of rings and fields; factorization theory; groups with operators; Galois theory; structure of fields; valuations.

MAS 5312. Abstract Algebra II (3). Prerequisite: MAS 5311. Continuation of MAS 5311.

MAS 5731. Computer Algebra (3). Prerequisite: MAS 4302. Corequisite: MAS 5307. Factorization of polynomials; decomposition of polynomials; the method of Groebner bases, applications; computing with algebraic numbers.

MAS 5932r. Topics in Algebra (1–3). Prerequisite: Instructor permission. May be repeated to a maximum of twelve semester hours.

MAS 6939r. Advanced Seminar in Algebra (1). (S/U grade only). May be repeated to a maximum of twelve semester hours.

MAT 5907r. Directed Individual Study (1–4). (S/U grade only). May be repeated to a maximum of eighteen semester hours.

MAT 5911r. Supervised Research (1–5). (S/U grade only). Cannot be applied to the master's degree. May be repeated to a maximum of five semester hours.

MAT 5921r. Graduate Mathematics Colloquium (1). (S/U grade only). Prerequisite: Graduate standing. Speakers drawn from within the department, the wider mathematical community, and from colleagues in fields with related interests; descriptions of timely, cutting edge research in and utilizing mathematics; a full range of current mathematical research including the following: geometry and algebra, classical applied mathematics, computational techniques, biomedical applications, financial economics, mathematical aspects of cryptography and computer security. May be repeated to a maximum of eighteen semester hours.

MAT 5932r. Selected Advanced Topics (1–3). Prerequisite: Instructor permission. May be repeated to a maximum of twelve semester hours.

MAT 5933r. Special Topics in Mathematics (1–3). (S/U grade only). Prerequisite: Graduate standing. May be repeated to a maximum of twelve semester hours.

MAT 5939r. Graduate Seminar (1). (S/U grade only). Prerequisite: Instructor permission. May be repeated within the same term to a maximum of twelve semester hours.

MAT 5941. Internship in College Teaching (1–3). (S/U grade only).

MAT 5945r. Graduate Professional Internship (1–3). (S/U grade only). Prerequisite: Instructor permission. Supervised internship individually arranged to accommodate professional development in an area of application. May be repeated to a maximum of three semester hours.

MAT 5946r. Supervised Teaching (1–5). (S/U grade only). May be repeated to a maximum of five semester hours.

MAT 5971r. Thesis (3–6). (S/U grade only). A minimum of six semester hours credit is required for a thesis plan.

MAT 6908r. Directed Individual Study (1–4). (S/U grade only). May be repeated to a maximum of twelve semester hours.

MAT 6932r. Advanced Topics in Mathematics (1–3). May be repeated to a maximum of twelve semester hours.

MAT 6933r. Selected Advanced Topics (1–3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

MAT 6939r. Advanced Graduate Seminar (1). (S/U grade only). Prerequisite: Graduate standing. Each specialized seminar introduces students to new aspects of a theoretical or application area. May be repeated to a maximum of twelve semester hours.

MAT 6980r. Dissertation (1–12). (S/U grade only).

MAT 8964. Doctoral Preliminary Examination (0). (P/F grade only.)

MAT 8966. Master's Comprehensive Examination (0). (P/F grade only.)

MAT 8968r. Doctoral Qualifying Examination (0). (P/F grade only.)

MAT 8985r. Defense of Dissertation (0). (P/F grade only.)

MHF 5206. Foundations of Mathematics (3). Zermelo-Fraenkel axioms for set theory. Finite and infinite sets. Ordinal numbers, cardinal numbers. The axiom of choice and some of its equivalents.

MHF 5306. Mathematical Logic I (3). Prerequisite: MAS 4302. Propositional and predicate logic, models. Godels completeness theorem and related theorems. Applications to modern algebra. Non-standard analysis.

MTG 5326. Topology I (3). Prerequisite: Graduate standing. This course examines fundamental group and covering spaces, simplicial and CW complexes, elementary homotopy theory, elementary homology theory, and point set topology.

MTG 5327. Topology II (3). Prerequisite: MTG 5326. Continuation of MTG 5326.

MTG 5346. Algebraic Topology I (3). Prerequisite: MTG 5327. Singular homology and cohomology, orientation of manifolds, cup and cap products, Poincare and Lefschetz duality, acyclic models.

MTG 5347. Algebraic Topology II (3). Prerequisite: MTG 5346. This course examines singular homology and cohomology, orientation of manifolds, cup and cap products, Poincare and Lefschetz duality, and acyclic models.

MTG 5376r. Topological Structures (3). Prerequisite: MTG 5327. A study of one or more of the following structures: topological, P.L. or smooth manifolds, Riemannian geometry, homotopy theory, obstruction theory, fibre bundles. May be repeated to a maximum of six semester hours.

MTG 5932r. Topics in Geometry (1–3). Prerequisite: Instructor permission. May be repeated to a maximum of twelve semester hours.

MTG 6396r. Advanced Topics in Topology (3). May be repeated to a maximum of twelve semester hours.

MTG 6939r. Advanced Seminar in Topology (1). (S/U grade only). May be repeated to a maximum of eight semester hours.

OCP 5256. Fluid Dynamics: Geophysical Applications (3). Prerequisites: MAP 5431, 5346; or instructor permission. Shallow water theory, Poincare, Kelvin, and Rossby waves; boundary layer theory; wind-driven ocean circulation models; quasigeostrophic motion on a sphere, thermocline problem; stability theories. Also offered by the departments of Oceanography and Meteorology.

MATHEMATICS EDUCATION:
see Teacher Education

MEASUREMENT AND STATISTICS:
see Educational Psychology and Learning Systems

Graduate Department of MECHANICAL ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Website: <http://www.eng.famu.fsu.edu/me/>

Interim Chair: Eric Hellstrom; **Professors:** Alvi, Cattafesta, Cooley, Gibson, Hellstrom, Kalu, Larbalestier, Oates, J. Ordóñez, Shih; **Associate Professors:** Clark, Guo, Hollis, Hrudá, Kametani, Krick, Kumar, Moore; **Assistant Professors:** Hubicki, Nair, Shoel, Yaghoobian; **Teaching Faculty:** Akcayoglu (Panama City), Ali, Campbell, Dunlap (Panama City), Larson, McConomy, C. Ordóñez, Traynham (Panama City); **Adjunct Faculty:** Vanderlaan; **Affiliated Faculty:** Hussaini, Kopriva, Tam; **Research Faculty:** Vahab, Gustavsson, Selleppan; **Professors Emeriti:** Buzyna, Cartes, Krothapalli, Luongo, Van Dommelen, Van Sciver

The Department of Mechanical Engineering offers two graduate degree programs: the Master of Science (MS) and the Doctor of Philosophy (PhD). The graduate program in mechanical engineering is designed to provide students with the necessary tools to begin a productive career in engineering practice or research, a career that probably will span a period of three to five decades. Although it is not possible to teach everything that one needs to know in the graduate program, the program provides the student with the skills, knowledge, and philosophy that will enable the student to continue to grow throughout his/her career. The graduate training a student receives emphasizes a fundamental approach to engineering whereby the student learns to identify needs, define problems, and apply basic principles and techniques to obtain a solution. This philosophy is incorporated in classroom lectures, laboratory activities, design projects, and research.

It is essential that a successful department cultivates and maintains a diverse and dynamic program that is nationally recognized. The department is actively involved in basic research, which expands the frontiers of knowledge, as well as applied research designed to solve present and future technological needs of society. The major research activities are focused in three primary areas: fluid mechanics and heat transfer, solid mechanics and materials science, and dynamic systems and controls (including mechatronics and robotics). State-of-the-art laboratories are associated with each of these areas. In addition, much of the research is conducted in cooperation with the National High Field Magnetic Laboratory (NHMFL), the Department of Scientific Computing, the Center for Materials Research and Technology (MARTECH), and the Center for Nonlinear and Non-equilibrium Aero Science.

A complete description of the mechanical engineering graduate program, including recent changes, may be found at <http://www.eng.famu.fsu.edu/me>.

Research Programs and Facilities

The **Florida Center for Advanced Aero-Propulsion (FCAAP)** has been established to ensure that the State of Florida remains at the forefront of the aerospace industry and maintains a highly skilled workforce to develop, test, transition, and manufacture the next generation of aerospace technologies. The center is a partnership between four state universities, with FSU as the leading institution. The **Advanced Aero-Propulsion Laboratory (AAPL)**, also located at FSU, is the primary experimental and research facility. AAPL contains testing and diagnostic facilities not commonly available at university research centers. These include: a new Hot Jet Anechoic Facility capable of operating supersonic hot jets - up to 2000 Fahrenheit, a STOVL Test Facility, an optical diagnostic development lab, and a supersonic and a large subsonic wind tunnel. In addition to AAPL, the center is home to several state-of-the-art research laboratories led by an experienced team of internationally recognized scientists, researchers, and engineers. In collaboration with government and industry, FCAAP will serve as a technology incubator to promote innovative research and encourage a rapid transition of technologies to market. FCAAP plays a vital role in shaping the next generation of air and spacecraft designs, space transport systems, and aviation safety. FCAAP's current research is focused on Active Flow, Noise and Vibration Control, Aero-optimization, Advanced Propulsion and Turbomachinery Systems, Sensor and Actuator Development, Advanced Diagnostics, Aero-Thermodynamics and Aeroacoustics, High Performance Computation, Smart Materials, Systems and Structures, and other related fields.

The vision of the **Center for Intelligent Systems, Control, and Robotics (CISCOR)** is to use state-of-the-art technology to develop practical solutions to problems in systems, control, and robotics for applications in industry and government. CISCOR is a cooperative research effort in the automated systems area across four departments (Mechanical, Chemical, Electrical, and Civil) in the College of Engineering. The center's goal is to provide a means for the state of Florida to achieve national prominence in the area of automated systems and to assume a leadership role in the state of Florida's technology

of the future. Established in 2003, CISCOR has become a leading center in Florida for the development and implementation of technologies related to Intelligent Systems, Control, and Robotics.

The multidisciplinary **High-Performance Materials Institute (HPMI)** performs research for emerging advanced composites, nanomaterials, multifunctional materials and devices, and advanced manufacturing. Currently, HPMI is involved in four primary technology areas: High-Performance Composite and Nanomaterials, Structural Health Monitoring, Multifunctional Nanomaterials Advanced Manufacturing, and Process Modeling. Over the last several years, HPMI has proven a number of technology concepts that have the potential to narrow the gap between research and practical applications of nanotube-based materials.

The **National High Magnetic Field Laboratory (NHMFL)** is the only facility of its kind in the United States. The National High Magnetic Field Laboratory is the largest and highest-powered magnet laboratory in the world, headquartered in a sprawling 370,000-square foot complex near Florida State University. The lab also includes sites at the Los Alamos National Laboratory in New Mexico and at the University of Florida. Together these three institutions operate the lab, collaborating in a unique interdisciplinary way to advance basic science, engineering, and technology in the 21st century.

The **Applied Superconductivity Center (ASC)**, a research division of the National High Magnetic Field Laboratory, was established to advance the science and technology of superconductivity and particularly superconductivity applications by investigating low temperature and high temperature models.

The **Energy and Sustainability Center (ESC)** has been established to address our most challenging energy issues through the development of innovative alternative energy solutions for consumers and industry. The center will develop a portfolio of pre-commercial research programs to explore reliable, affordable, safe, and clean energy technologies. A key objective of ESC is to encourage future commercial application of the technologies that flow from the research. ESC has a number of specialized facilities for technology development and implementation including: a fuel-cell testing laboratory, a water-electrolysis electrode testing laboratory, a solar-thermal system component testing facilities, small-scale electrical power systems laboratory, and other facilities through collaborations with the FAMU-FSU College of Engineering, the Center for Advanced Power Systems (CAPS), and the National High Magnetic Field Laboratory (NHMFL).

The **Institute for Energy Systems, Economics and Sustainability (IESES)** at Florida State University will be an essential component of Florida's leadership in sustainable energy. The Institute is a public resource. We carry out scholarly basic research and analysis in engineering, science, infrastructure, governance, and the related social dimensions; all designed to further a sustainable energy economy. The Institute unites researchers from the disciplines of engineering, natural sciences, law, urban and regional planning, geography, and economics to address sustainability and alternative power issues in the context of global climate change. Our goal is scholarship that leads to informed governance, economics, and decision making for a successful Florida sustainable energy strategy.

The **Active Structures and Microsystems Laboratory** is focused on the mechanics and physics of adaptive materials and their integration into structures and devices. This includes exploring fundamental field-coupled behavior (electric, magnetic, photomechanical, chemical), device and structural dynamics research, and the development of advanced and control designs for broadband performance and precision tracking. This requires synergies between materials science, engineering, and mathematics. We collaborate with several researchers that range in backgrounds that include physics, mathematics, experimental fluid dynamics, and materials science to advance the field.

The **Cryogenics Laboratory**, located in the National High Magnetic Field Laboratory, is a fully developed facility for conducting low-temperature experimental research and development. The laboratory, which occupies about 400 square meters, supports in-house development projects as well as scientific work. The experiment apparatus within the lab include the following: 1) **Liquid Helium Flow Visualization Facility (LHFVF)**: This facility consists of a 5 m long, 20 cm ID horizontal cryogenic vacuum with vertical reservoirs at each end. A variety of experimental test sections can be installed in the facility for measurements of flow and heat transfer including flow visualization studies. The LHFVF is currently being used for PIV studies of forced flow superfluid helium. 2) **Cryogenic Helium Experimental Facility (CHEF)**: This facility consists of a 3 m long, 0.6 m ID cryogenic vessel with N₂ and He temperature thermal shields. CHEF is equipped with a high-volume flow bellows pump capable of up to 5 liters/s. Currently, CHEF is being used to study high Reynolds number liquid helium flow through orifice plates. 3) **Liquid Helium Research Test Stands**: Numerous conventional vertical access dewars and insert cryostats are available for smaller scale experiments on heat transfer and flow. These include dewars between 10 cin ID with depths to 2 in. 4) Additional equipment: The laboratory contains all necessary equipment to carry out modern cryogenic experiments. Modern instrumentation for data

acquisition is available to support experiments. High vacuum equipment includes a mass spectrometer leak detector and two portable turbo pump systems that provide thermal isolation. A high-capacity vacuum pump (500 liter/s) is used to support sub-atmospheric liquid helium experiments as low as 1.5K.

The **Advanced Materials Processing and Applications Laboratory (AMPAL)** is focused on the processing, characterizing, and testing of materials in conjunction with micromechanical modeling. Materials of interest include, but are not limited to, super plastic alloys (Niobium, Copper, Aluminum), structural steel, and high-strength conductors such as Copper-Silver. These materials are employed in a number of scientific and engineering applications ranging from superconducting and electronic applications (radio frequency cavities, magnetic materials, etc.) to structural applications. Processing involves the development of various severe plastic deformation methods such as tri-axial forging, equal channel angular extrusion (ECAE), rolling, swaging, and wire drawing suitable for producing bulk quantities of ultra-fine-grained material. Also, currently being explored is a novel case hardening technique for both stainless steels and low carbon steels. The laboratory is equipped with various tools for characterization and testing. Some of the equipment include a high-resolution analytical transmission electron microscope, field emission scanning electron microscope equipped with dual beams capable of performing in-situ ion-milling (ion beam), and 2D/3D-electron backscatter diffraction (EBSD) measurements (electron beam). The micromechanics modeling efforts provide an opportunity to correlate the material properties with microstructure. The mechanical modeling effort is being used to explain tension, nano-indentation, shear, and super-plasticity of advanced materials including composite. AMPAL collaborates with various other research groups and institutions both nationally and internationally to achieve our research goals.

The **Scansorial and Terrestrial Robotics and Integrated Design (STRiDe) Laboratory** is dedicated to the design, analysis, and manufacturing of novel and dynamic robotic systems. In order to imbue robotic systems with the agility and functionality akin to their biological inspirations, it is critical to understand the interplay between the structures' underlying passive dynamics and the control systems that enervate them. Research in this lab involves working closely with biologists to understand the underlying functional principles behind successful animal locomotion. These principles are then encoded in simplified dynamic models. The analysis of these models leads to insight regarding the roles of passive and active elements in creating self-stabilizing dynamic systems. Innovative manufacturing processes, such as Shape Deposition Manufacturing (SDM) and other rapid prototyping techniques, are then applied to build robots capable of moving in a dynamic and agile manner over difficult terrain. To analyze and build these robots, the lab is equipped with dynamic motion analysis equipment as well as a suite of state-of-the-art manufacturing tools.

Graduate students participating in research are provided office space in the laboratories and have access to substantial staff support from their research group.

Master's Program

The Department of Mechanical Engineering offers several options for the Master of Science degree. Students may pursue a traditional Mechanical Engineering degree (with a thesis or non-thesis option) or specialize in Sustainable Energy. The department is also a member of the Interdisciplinary Materials Science Program through which students can earn a master's degree in Materials Science. Additionally, highly-qualified and current undergraduate students may apply to the joint BSMS Pathway to begin taking graduate classes during their junior and senior year.

Admissions

Prospective students must have a BS degree (or a recognized equivalent) in Mechanical Engineering or any one of the following related fields: Any Engineering Major, Chemistry, Computer Science, Materials Science, Mathematics/Applied Mathematics, or Physics/Applied Physics. Non-majors, students without a BS degree in Mechanical Engineering, may be required to take up to twelve credit hours of remedial coursework in Mechanical Engineering as a condition of admission.

Applicants must have at least a 3.0 upper-division GPA and a Quantitative GRE score of 155 and Verbal GRE score of 150. International students must take the TOEFL exam and score at least 550 on the paper-based exam, 213 on the computer-based exam, or 80 on the Internet-based exam. Applicants must also submit a personal/research statement, résumé, and three letters of recommendation. Please visit the department website for additional details: <http://www.eng.famu.fsu.edu/me>.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this test, go to <http://www.ets.org/gre>.

Major in Mechanical Engineering

I. Thesis Option

Mechanical Engineering students must take the following minimum distribution of courses for a total of thirty credit hours:

Core Courses

- Nine credit hours: EML 5060 Analysis in Mechanical Engineering and two core courses in the major area (either Dynamics and Controls, Fluid Mechanics and Heat Transfer or Solid Mechanics and Materials Science).
- Core courses in Dynamics and Controls: EGM 5444 Advanced Dynamics (3), EML 5317 Advanced Design and Analysis of Control Systems (3), EML 5361 Multivariable Control (3), EML 5930r Special Topics in Mechanical Engineering (1–6).
- Core courses in Fluid Mechanics and Heat Transfer: EML 5152 Fundamentals of Heat Transfer (3), EML 5155 Convective Heat and Mass Transfer (3), EML 5709 Fluid Mechanics Principles with Selected Applications (3), EML 5930r Special Topics in Mechanical Engineering (1–6).
- Core courses in Solid Mechanics and Materials Science: EGM 5611 Introduction to Continuum Mechanics (3), EML 5930r Special Topics in Mechanical Engineering (1–6).

Mechanical Engineering Courses

- Six credit hours: two courses in Mechanical Engineering.

Electives

- Nine credit hours: Select three graduate-level courses in any engineering field, mathematics, or any science discipline (computer science, physics, etc.). Courses must be selected in consultation with the student's major professor. One of the three electives may include EML 5905 Directed Individual Study or EML 5910 Supervised Research.

Thesis

- Six credit hours: EML 5971 Thesis (3–6) and EML 8976 Master's Thesis Defense (0).

II. Non-Thesis Option

The non-thesis option requires thirty credit hours, of which at least twenty-seven credit hours must be letter-graded courses. Students must complete twenty-one credit hours of coursework within mechanical engineering. Nine credit hours may be taken outside the department in any of the following areas: engineering, mathematics, or any science discipline (computer science, physics, etc.).

Major in Sustainable Energy

Sustainable Energy students must take the following minimum distribution of courses for a total of thirty credit hours:

Core Courses

- Fifteen credit hours: EML 5060 Analysis in Mechanical Engineering I (3), CHM 5153 Engineering Electrochemistry (3), EML 5451 Energy Conversion Systems for Sustainability (3), EML 5452 Sustainable Power Generation (3), EML 5930r Special Topics in Mechanical Engineering (1–6).

Electives

- Nine credit hours: Select three graduate-level courses in engineering, mathematics, or any science discipline (computer science, physics, etc.). Courses must be selected in consultation with the student's major professor. One of the three electives may include EML 5905 Directed Individual Study or EML 5910 Supervised Research.

Thesis

- Six credit hours: EML 5971 Thesis (3–6) and EML 8976 Master's Thesis Defense (0).

Doctor of Philosophy

Admissions

PhD Program

Prospective students must have an MS degree in Mechanical Engineering or any one of the following related fields: any Engineering Major, Chemistry, Computer Science, Materials Science, Mathematics/Applied Mathematics,

or Physics/Applied Physics. Non-majors, students without a BS degree in Mechanical Engineering, may be required to take up to twelve credit hours of remedial coursework in Mechanical Engineering as a condition of admission.

Applicants must have at least a 3.0 upper-division GPA and a Quantitative GRE score of 155 and Verbal GRE score of 150. International students must take the TOEFL Exam and score at least 550 on the paper-based exam, 213 on the computer-based exam, or 80 on the Internet-based exam. Applicants must also submit a personal statement, résumé, and three letters of recommendation. Please visit the department Web site for additional details: <https://www.eng.famu.fsu.edu/me>.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this test, go to <http://www.ets.org/gre>.

BS to PhD Program

In addition to the standard PhD program the department offers a direct BS to PhD program. This program is limited to students with excellent academic transcripts and demonstrated potential for advanced research. Applicants must submit strong letters of recommendation from professors or persons qualified to evaluate their academic potential. Finally, a member of the Mechanical Engineering faculty must recommend the student to the program. Admission to the program is finalized at the end of the second semester. During their first two semesters, students must maintain a minimum graduate GPA of 3.50. Final admission to the PhD program is granted by the Graduate Committee.

Students initially admitted to the master's program may request a transfer to the BS-PhD program at the end of their second semester. The student must have maintained a graduate GPA of 3.50 or better during their first two semesters.

Degree Requirements

PhD Program

The standard PhD program requires forty-five credit hours of coursework, of which at least twenty-four credit hours must be dissertation hours. The remaining twenty-one letter-graded credit hours are divided into three areas:

General Engineering and Mathematics

Students must complete six credit hours of general engineering and advanced mathematics courses. One of those courses must be EML 5061, Analysis in Mechanical Engineering II (3). The remaining course must be from the approved course list. See department Web site for approved list.

Electives

Students must complete fifteen credit hours of graduate-level, letter graded electives. Courses may be taken in any engineering program, mathematics, and/or any science discipline.

BS to PhD Program

The BS-PhD program requires sixty credit hours of coursework, of which at least twenty-four credit hours must be dissertation hours. The remaining thirty-six letter-graded credit hours are divided into five areas:

General Engineering and Mathematics

Students must complete six credit hours of general engineering and advanced mathematics courses. One of those courses must be EML 5061, Analysis in Mechanical Engineering II (3). The remaining course must be from the approved course list. See department Web site for approved list.

Core Courses

Students must complete EML 5060, Analysis in Mechanical Engineering I (3), and two courses in their chosen depth area for a total of nine semester hours.

Mechanical Engineering Courses

Students must complete six credit hours of general mechanical-engineering courses.

Electives

Students must complete fifteen credit hours of electives. Courses may be taken in any engineering program, mathematics, and/or any science discipline. Students may substitute one elective course with a Directed Individual Study (DIS) course or Supervised Research (SR) course.

Additional Requirements

Preliminary Examination

All PhD students are required to register for and pass EML 8968 (Preliminary Examination) before the end of their fourth semester. The exam is designed to evaluate a student's grasp of a specified spectrum of Mechanical

Engineering (at the undergraduate level) and their ability to think creatively. It consists of an oral examination and is administered each Spring term. After passing the exam the student will be granted doctoral candidacy status, allowing the student to register for dissertation credit hours.

Prospectus Defense

Within one year of obtaining candidacy status each PhD student must present to their Committee a prospectus on a research project suitable for a doctoral dissertation. A forty-five minute presentation of the proposed dissertation topic will be presented to the students' graduate committee for approval.

Dissertation Defense

Demonstrated ability to perform original research at the forefront of mechanical engineering is the final and major criterion for granting the doctoral degree. The candidate's dissertation serves, in part, to demonstrate such competence; on completion it is defended orally in a public seminar before the doctoral dissertation committee, which may then recommend the awarding of the degree.

Doctor of Philosophy in Materials Science and Engineering

The Department of Mechanical Engineering is a member of the Interdisciplinary Program in Materials Science and Engineering. For more information on the Materials Science and Engineering program, please visit <http://materials.fsu.edu>.

Definition of Prefixes

EAS—Aerospace Engineering

EGM—Engineering Science

EGN—Engineering: General

EMA—Materials Engineering

EML—Engineering: Mechanical

Graduate Courses

EAS 5102. Fundamentals of Aerodynamics (3). Prerequisites: EML 3015C and EML 3016C. This course includes fundamental fluid mechanics and aerodynamic principles in the design of airfoil and aircraft wings. The course provides a comprehensive review concerning applications, technological advances, and social impacts on the development of a modern flight vehicle. The course provides an overview of the guiding principles and experimental observations to analyze basic aerodynamic characteristics of an aircraft configuration.

EGM 5444. Advanced Dynamics (3). Prerequisites: MAP 3306. Topics include particle and rigid body kinematics, particle and rigid body kinetics, D'Alembert Principle, Lagranges equations of motion, system stability, computational techniques, orbital dynamics, multi-body dynamics.

EGM 5611. Introduction to Continuum Mechanics (3). Prerequisite: Graduate standing. Solid and fluid continua. Cartesian tensor theory. Kinematics of infinitesimal deformation, relations between stress, strain, and strain rate for elastic, plastic, and viscous solids and for compressible and viscous fluids. General equations of continuum mechanics, integral forms, and their physical interpretation. Particular forms of equations and boundary conditions for elastic and viscoelastic solids and Newtonian fluids.

EGM 5612. Solid Mechanics and Electromagnetics of Continuous Media (3). Prerequisites: Familiarity with topics of strength of materials, concepts of stresses and strains, a basic understanding of thermodynamics and electromagnetics. This course introduces concepts of continuum thermo-mechanics and electromagnetics with application in solving field-coupled boundary value problems.

EGM 5810. Viscous Fluid Flows (3). Prerequisite: EML 5709. Presents the basic fundamentals underlying the mechanics of gas, air, and fluid flows. Discussion of the possible methods of estimating and predicting the characteristics and parameters governing those flows.

EGM 6845. Turbulent Flows (3). Prerequisite: EML 5709. In-depth study of turbulent, flows, statistical description of turbulence; instability and transition; turbulence closure modeling; free shear and boundary layer flows; complex shear flows; development of computational strategies; recent literature on applications and chaos phenomena.

EMA 5226. Mechanical Metallurgy (3). Prerequisites: EML 3234. Tensile instability, crystallography, theory of dislocations, plasticity, hardening mechanisms, creep and fracture, electron microscopy, composite materials.

EMA 5514. Electron Microscopy (3). Prerequisite: Instructor permission. This course focuses on fundamentals and techniques of electron microscopy as applied to the determination of physical, chemical, and structural properties of materials and materials behavior in practice.

EMA 5814. Computational Material Physics (3). This course covers numerical simulation techniques for predicting various physical properties of conventional materials, nanomaterials, and biomaterials. Students use computational material physics tools to understand, predict, and design new materials and guide experimental studies at the atomistic level.

EML 5045. Manufacturing Processes Control (3). Prerequisites: EML 3234 and EML 3012C. Corequisites: EML 4312 or EML 5311. This course introduces essential knowledge in the control of manufacturing systems and processes.

EML 5060. Analysis in Mechanical Engineering (3). Prerequisite: Graduate standing in mechanical engineering. Familiarizes the student with methods of analysis in mechanical engineering. Surveys applications of integration and series, ordinary and partial differential equations, and linear algebra.

EML 5061. Analysis in Mechanical Engineering II (3). Prerequisite: EML 5060 or equivalent. This course familiarizes students with applications of vector calculus and partial differential equations in mechanical engineering.

EML 5072. Applied Superconductivity (3). Prerequisites: EEL 3472; EML 3100; 3234; PHY 3101. Introduction to superconductivity for applications, fundamentals of the superconducting state, transport current and metallurgy of superconductors, Superconducting electrons and magnets, system engineering.

EML 5103. Advanced Engineering Thermodynamics (3). Prerequisite: Graduate standing in mechanical engineering. This course in thermal fluids covers the axiomatic formulations of the first and second laws of thermodynamics; general thermodynamic relationships and properties of real substances; energy, exergy, and second-law analysis of energy-conversion processes; reactive systems and multiphase equilibrium; entropy generation minimization and thermodynamic optimization; as well as applications to low-temperature refrigeration and power-generation systems.

EML 5152. Fundamentals of Heat Transfer (3). Prerequisite: Graduate standing in mechanical engineering. An introductory course in basic heat transfer concepts. Topics include conduction and heat diffusion equation, forced and free convection, radiative heat transfer, boiling heat transfer, and condensation.

EML 5155. Convective Heat and Mass Transfer (3). Prerequisites: EGM 5810; EML 5152. Familiarizes the student with methods to evaluate a convection heat transfer coefficient and a mass transfer coefficient for a variety of engineering applications. Evaluation of the driving force in mass transfer and combined problems.

EML 5162. Cryogenics (3). Prerequisites: EML 3015C, EML 3016C, and EML 3234. Miscellaneous requirement: EML 4512 and PHY 3101 are recommended. This course focuses on the fundamental aspects of cryogenics system and engineering properties of materials and fluids at low temperatures; cryogenic heat transfer and fluid dynamics, low temperature refrigeration and system engineering.

EML 5311. Design and Analysis of Control Systems (3). Prerequisite: MAP 3306. Mathematical modeling of continuous physical systems. Frequency and time domain analysis and design of control systems. State variable representations of physical systems.

EML 5317. Advanced Design and Analysis of Control Systems (3). Design of advanced control systems (using time and frequency domains) will be emphasized. Implementation of control systems using continuous (operational amplifier) or digital (microprocessor) techniques will be addressed and practiced.

EML 5361. Multivariable Control (3). Prerequisite: EML 4312 or 5311. Course covers H2 and H control design for linear systems with multiple inputs and multiple outputs and globally optimal techniques, fixed-structure (e.g., reduced-order) techniques. Includes introductory concepts in robust control.

EML 5422. Fundamentals of Propulsions Systems (3). Prerequisite: Graduate standing in mechanical engineering. This course offers an analysis of the performance of propulsion systems using fundamental principles of thermodynamics, heat transfer, and fluid mechanics. Systems studied include turbojet, turbofan, ramjet engines, as well as piston-type internal combustion engines.

EML 5451. Energy Conversion Systems for Sustainability (3). Prerequisites: Requires graduate standing. This course discusses the challenge of making the global energy system independent of finite fossil-energy sources and, instead, dependent on environmentally sustainable energy sources. The course emphasizes strategies for producing energy that is free of greenhouse-gas emissions, including renewable energy sources such as solar, wind, and biomass. The course focuses on direct energy conversion and covers topics such as photovoltaic cells, fuel cells, and thermoelectric systems.

EML 5453. Sustainable Power Generation (3). Prerequisites: EML 4450 or EML 5451 or graduate student standing in engineering or sciences. This course is a continuation of sustainability energy-conversion systems and focuses on solar electricity, biopower, biofuels, and hydrogen. The course also discusses the practicality of hydrogen-based transportation.

EML 5525. Design and Modeling for Manufacturing Processes (3). Prerequisites: EML 3012C and EML 3018C. This course covers descriptive and analytical treatment of manufacturing processes and production equipment, automation, as well as applications of mechanics stress analysis, vibrations, heat transfer. The course includes discrete time simulation.

EML 5537. Design Using FEM (3). The Finite Element Method - what it is, elementary FEM theory, structures and elements, trusses, beams, and frames, two-dimensional solids, three-dimensional solids, axisymmetric solids, thin-walled structures, static and dynamic problems, available hardware and software, basic steps in FEM analysis, pre/post processing, interpretation of results, advanced modeling techniques, design optimization, advanced materials using FEM.

EML 5543. Materials Selection in Design (3). Prerequisite: EML 3234 or equivalent. This course examines the application of materials predicated on material science and engineering case studies covering most engineering applications.

EML 5709. Fluid Mechanics Principles with Selected Applications (3). Prerequisites: EGM 5611; EML 5060; graduate standing in mechanical engineering. Introductory concepts, description, and kinematical concepts of fluid motion, basic field equations, thermodynamics of fluid flow, Navier-Stokes equations, elements of the effects of friction and heat flow, unsteady one-dimensional motion, selected nonlinear steady flows.

EML 5710. Introduction to Gas Dynamics (3). Concentrates on the unique features of compressibility in fluid mechanics. It provides the student with knowledge and understanding of the basic fundamentals of compressible fluid flow and is basic to studies in high-speed aerodynamics, propulsion, and turbomachinery.

EML 5725. Introduction to Computational Fluid Dynamics (3). Prerequisites: EML 5709. Topics for this course include introduction to conservation laws in fluid dynamics; weak solutions; solving the full potential equations for subsonic, transonic, and supersonic flows; solving system of equations. In particular, upwind schemes and flux splitting will be introduced in solving the Euler equations. Coordinate transformation and grid generation methods will also be covered.

EML 5802. Introduction to Robotics (3). Prerequisite: Graduate standing in mechanical engineering. A study of the fundamentals of robot operation and application including: basic elements, robot actuators and servo-control, sensors, senses, vision, voice, microprocessor system design and computers, kinematic equations, and motion trajectories.

EML 5803. Mechatronics II (3). This course focuses on developing greater competence in the application of electromechanical components to solve engineering problems and build 'smart' systems. The course focuses on the design interplay between electrical and mechanical systems. Students use microprocessors, circuits, sensors, and actuators in both labs and projects to develop multi-purpose electromechanical devices. The course provides instruction and practical exercises in: programming, electronics, signal conditioning, communication protocols, mechanical design, prototyping techniques, and system integration.

EML 5831. Introduction to Mobile Robotics (3). Prerequisite: Graduate standing. This course examines analytical dynamic modeling and dynamic simulation of mobile robots, mobile robot sensors, basic computer vision methods, Kalman filtering and mobile robot localization, basic mapping concepts, path planning and obstacle avoidance, and intelligent-control architectures.

EML 5832. Bio/Robotic Locomotion (3). Prerequisite: Permission of Instructor. This course introduces the fundamental concepts for biological and robotic locomotion with limbs. Muscular-skeletal biomechanics for vertebrate and invertebrate animals are briefly reviewed including an overview of the function of muscles. Morphology, gaits, posture, and the effect of scale on legged locomotion are discussed. The history of legged robots is reviewed. Reduced-order dynamic models of walking and running are introduced. Techniques for analyzing the stability of these periodic hybrid-dynamic systems are covered. The course includes the development and analysis of simulation and hardware platforms of locomotion systems.

EML 5905r. Directed Individual Study (1-9). (S/U grade only). Instructor permission required. Individual study topics are determined by the instructor and student. May be repeated to a maximum of forty-five semester hours.

EML 5910r. Supervised Research (1-5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

EML 5930r. Special Topics in Mechanical Engineering (1-6). Prerequisite: Instructor permission. This course explores various topics in mechanical engineering with emphasis on recent developments. Content and credit will vary. Consult the instructor.

EML 5935r. Mechanical Engineering Seminars (0). (S/U grade only). May be repeated to a maximum of ten times.

EML 5946. Professional Internship Experience in Mechanical Engineering (4). This course provides practical experience through working as an intern at selected industry or research laboratories supervised by the on-the-job mentors and by the Department of Mechanical Engineering. The course is designed to provide the student with professional internship experience in preparation for his/her future career development.

EML 5971r. Master's Thesis Research (1-12.) (S/U grade only). This course provides a means of registering for thesis research work and recording progress towards its completion. Student must consult with the academic department for appropriate registration of course credit hours. May be repeated to a maximum of forty-five (45) credit hours; repeatable within the same term.

EML 6365. Robust Control (3). Prerequisite: EML 5361. Course covers control design for systems with uncertain dynamics; robust H design, structured singular value synthesis; LMI and Riccati equation solution techniques.

EML 6980r. Dissertation (2-9). (S/U grade only). May be repeated to a maximum of ninety-nine semester hours.

EML 8968. Preliminary Doctoral Examination (0). (P/F grade only.)

EML 8976r. Master's Thesis Defense (0). (P/F grade only.)

EML 8985r. Dissertation Defense (0). (P/F grade only.) May be repeated to a maximum of three times.

Graduate MEDICINE

COLLEGE OF MEDICINE

Website: <http://med.fsu.edu/>

Department of Biomedical Sciences-Chair: Richard Nowakowski;

Professors: Blaber, Delp, Diaz, Galasko, Hajcak, Hurt, Joyce, Kabbaj, Laywell, Levenson, Nowakowski, Olcese, Overton, Ren, Stefanovic, Suo, Y.Wang; **Associate Professors:** Arbeitman, Bienkiewicz, Gunjan, Horabin, Kumar, Leadem, C. Lee, Meckes, Megraw, Pinto, Stanwood, Zhou; **Assistant Professors:** Irianto, Rizkallah, Tomko, X. Wang, Y. Wang; **Eminent Scholar:** Bhide; **Research Faculty I:** Duclot, Graham, Kao, Nemeč, Pritchard, Rodriguez, Zhang; **Research Faculty II:** McCarthy, X. Wang, Zorio; **Assistants in Medicine:** Bradley, Connolly, Wu; **Associates in Research:** Foster, Vied, Y. Yang; **Senior Research Associate:** Didier, Mercer; **Department of Clinical Sciences-Chair:** Jonathan Appelbaum; **Professors:** Alexandraki, Applebaum, Douglas, Kroker-Bode, Lomax-Homier, Maitland, Meek, O'Keefe, Sandroni, Watson, Wetherby, Wiese-Rometsch; **Associate Professors:** Bush, Danforth, Khajavi, Rahangdale, Stavros, Sweeney, Todd; **Assistant Professor:** Norton; **Research Faculty I:** Daly Holland, C. Nottke, Walton-Walker; **Department of Family Medicine and Rural Health-Chair:** Joedrecka Brown Speights; **Professors:** Brown Speights, Dunn, Fogarty, Harrison, Littles, McLeod, Van Durme; **Associate Professors:** Alexander, R. Campbell, Gitu, Myers, Quintero, Zedaker; **Assistant Professors:** Fleischer, Flowers, Gadson, Hellgren, Hogans-Mathews, LaJoie, Speights, Welch; **Instructional Specialist II:** Taite; **Assistant in Medicine:** De Leon; **Department of Geriatrics-Chair:** Paul Katz; **Professors:** Gloth, Granville, Katz, Pomidor, Terracciano; **Associate Professors:** Agens, Suchak; **Assistant Professors:** Kinsell, Mazumder, Mulrooney, Nowakowski, Wagner; **Associate in Research:** Baker; **Department of Behavioral Sciences and Social Medicine-Chair:** Leslie Beitsch; **Professors:** Beitsch, Flynn, Glueckauf, Harman, Naar, Reyes, Rust; **Associate Professors:** Ennis, Gabriel, Gerend, Hayes, Howren, Jean-Pierre, Nair-Collins, Painter, Pickett, Rosado, Sutin, Turner; **Assistant Professors:** Blackburn, Carretta, Dark, Goldfarb, Martinez-Hyde, McQuirt, Mesidor, Porter, Saunders; **Senior Research Associate:** Aubrey; **Assistant in Research:** Geletko; **Research Faculty I:** Luchetti, Mitchell, Sheffler; **Faculty Administrator:** Leeds, M. Smith; **School of Physician Assistant Practice Associate Dean:** James Zedaker; **Faculty:** Bastin, Bennet Wilke, Cole, M. Johnson, Morgan, Nuccio, Pragle, B. Smith, Taylor

For a complete listing of part-time clinical faculty, please visit the FSU College of Medicine Web site at <https://med.fsu.edu/directory/home>.

Doctor of Medicine (MD) Degree

Florida State University provides a four-year program of study leading to the Medical Doctor (MD) degree. The College trains students in allopathic medicine, which includes diagnosing, managing, and treating disease. Upon completion of the four-year MD educational program, physicians pursue graduate medical education (internship, residency, and sometimes fellowships). Training in residency programs may take from three to nine additional years after completion of medical school. The medical school curriculum provides a generalist education and focuses on practice in ambulatory settings, specifically to serve currently underserved populations, i.e., rural, inner city, minority, and geriatric patients in the state of Florida.

Fourth Year Electives

In the fourth year of study, the MD program offers a wide variety of electives to help students develop skills in their specific areas of study and practice. Electives are available in the fields of family medicine, geriatrics, internal medicine, obstetrics/gynecology, pediatrics, psychiatry, surgery and others. For a complete and current list of fourth-year electives, please visit our Web site at <https://med.fsu.edu/medicalEducation/syllabi>.

Honors Medical Scholars Program

The FSU College of Medicine in conjunction with the FSU Honors Office has established a program that is open annually to qualified students. The program allows eligible FSU honors students to pursue a Bachelor of Science degree of their choice while also participating in the Honors Medical Scholars Program, which includes a seminar course, mentorship program, and required pre-medical courses and experiences. Students participating in the program may be eligible for early admission to the FSU College of Medicine upon completion of pre-med requirements. Applications and program details are available from the FSU Honors Office at (850) 644-1841.

Doctor of Philosophy (PhD) in Biomedical Sciences

The PhD in Biomedical Sciences program is designed to prepare the next generation of health scientists for medical research and teaching in an era of increasing coordination and integration of traditional disciplines. Undergraduate majors in biology, biochemistry, chemistry, microbiology, or other life sciences are suitable for graduate studies in biomedical sciences. Research rotations during the first year allow students to make an informed choice regarding the research area and major professor with whom they will conduct their PhD work. A core curriculum of the fundamentals, the choice of electives from other departments, and intellectual interaction with faculty and postdoctoral fellows encourage graduate students to mature into independent scientists. Graduates of the PhD in Biomedical Sciences program will be prepared to join the scientific workforce trained for careers in an interdisciplinary environment. Full information and course offerings within this program are available in the "Biomedical Sciences" chapter of this *Graduate Bulletin*.

For complete details on degree requirements, plus a description of the College, its facilities, opportunities, and available financial assistance, refer to the "College of Medicine" chapter of this *Graduate Bulletin*.

Master of Science in Physician Assistant Practice (PA)

The Florida State University PA is a 27-month, 7-semester, 111 credit hour program designed to train students to practice medicine as physician assistants as part of the Physician-PA Team. Upon completion, our graduates will receive the Master of Science in Physician Assistant Practice degree. The PA Program at FSU is extremely challenging with a strong emphasis in the biomedical sciences, simulation, and procedural skills. Although challenging, students will find a welcoming environment and an unrivaled network of support provided by an inter-professional team who is committed to students' academic and professional success.

To be considered for graduation from the FSU College of Medicine PA program, a student must be judged by the PA Student Progress Committee to be in good standing; successfully complete and pass all required courses and clinical clerkships (rotations) with a passing grade of "C" or better; earn a 3.0 cumulative GPA at the time of graduation; and demonstrate successful completion of a summative evaluation which includes: 1) a comprehensive written examination, 2) an objective structured clinical exam (OSCE), and 3) a professional behavior assessment.

Definition of Prefixes

BCC—Basic Clinical Clerkships
BMS—Basic Medical Sciences
ENT—Entrepreneurship
GMS—Graduate Medical Sciences
IHS—Interdisciplinary Health Sciences
MDE—Medical Electives
PAS—Physician Assistant
PSB—Psychobiology

Graduate Courses

BCC 7112. Internal Medicine (6). This clerkship is designed to allow students to participate in the management of patients with common clinical presentations encountered in the general practice of internal medicine.

BCC 7113. Internal Medicine Sub-Internship (4). Prerequisites: Completion of 3rd year of medical school, including completion of M3 IM Clerkship. This clerkship allows students the opportunity to participate in the management of patients with common clinical presentations encountered in the practice of hospital-based internal medicine. Each student has the opportunity to experience a broad range of illness severity ranging from acute care upon presentation to the emergency department to life-threatening processes in the intensive care unit. Students also have the opportunity to improve their basic clinical skills, learn new inpatient procedures and examination techniques, and assess the effectiveness of their clinical interventions.

BCC 7130. Obstetrics/Gynecology Clerkship (6). This clinical clerkship is designed to acquaint the student with the varied aspects of medical care for women, with emphasis on acquiring the basic skills of gynecologic and obstetrical history-taking and physical examination, participating and assuming responsibility in the evaluation and care of outpatients and inpatients, and acquiring practical experience in the operating and delivery room areas.

BCC 7140. Pediatrics Clerkship (6). Prerequisite: Satisfactory completion of all year-one and year-two curricula. This pediatrics clerkship is a six-week learning experience with an emphasis on ambulatory pediatrics. Students learn under the supervision of clerkship faculty trained to teach in the clinical setting. Students interact with pediatric patients who present a variety of common pediatric diseases/conditions.

BCC 7150. Psychiatry Clerkship (6). Prerequisites: Satisfactory completion of all year-one and year-two curricula. Students learn pathophysiology, diagnosis, and management of common problems in mental health and psychiatry in hospital and out-patient settings.

BCC 7160. Surgery Clerkship (6). Prerequisites: Satisfactory completion of all year-one and year-two curricula. In this course, students learn pathophysiology, diagnosis, and management of common problems in general surgery, otolaryngology, orthopedics, OB/GYN, urology, and neurosurgery in hospital and out-patient settings.

BCC 7170. Community Medicine (2). This two week course in the third year of the medical curriculum is designed to broaden students' understanding of the role played by community agencies in health promotion and disease prevention. Students are assigned to a community health agency where they work under the supervision of a preceptor to assist the agency in fulfilling its goals.

BCC 7174. Primary Care Geriatrics (4). Prerequisite: Satisfactory completion of all year-one, year-two, and year-three courses. This required 4th year clerkship provides varied primary care experiences with older adult patients. The major goal is to provide an in-depth exposure of the medical student to the intricacies, subtleties, barriers and obstacles to be overcome in providing quality primary care to older patients in the settings where that care most frequently occurs. Emphasis is placed on the physician's role in maintaining, restoring and rehabilitating the older adult patient to achieve the most independent function possible. Consistent with a "school without walls" concept, students follow assigned patients in an effort to explore how continuous and coordinated geriatric care might be provided. Competency in the identification, evaluation and treatment of common geriatric problems and syndromes is pursued.

BCC 7175. Clerkship in Family Medicine (6). This community-based, ambulatory clerkship emphasizes the identification, evaluation and treatment of family practice patients with common medical, surgical and psychological conditions. Students in this course spend eight patient care sessions/week under supervision of the family physician in the office; complete two required clerkship projects; and utilize Web-based self-directed learning activities.

BCC 7176. Family Medicine Sub-Internship (4). Prerequisite: Completion of all required third-year clerkships. The goal of the Advanced Family Medicine Clerkship (AFMC) is to expose students to an intense clinical experience in a family medicine setting. Consistent with the college's mission to train physicians to care for patients located in rural areas and patients who are medically underserved, the clerkship takes place in settings that expose students to these patient populations. Students select one of two available options for the AFMC—a rural site or a family medicine residency program in Florida.

BCC 7180. Emergency Medicine (4). Prerequisite: Satisfactory completion of three years of medical school. Students engage in appropriately directed patient history and physical exams, physical diagnoses, medical decision making, acquisition of procedural skills, and exposure to a broad base of undifferentiated patients with a wide variety of personal, social, and cultural issues that influence patient care. This environment places a premium on physical exam skills, diagnostic reasoning, recognition of life-threatening situations, and initiation of resuscitation in a wide range of diseases with varying degrees of urgency. Students are taught to appreciate the dynamic state of emergency medicine knowledge, the necessity for maintaining currency, and the means to do it.

BCC 7182. Doctoring 3 (6). (S/U grade only.) Prerequisites: Satisfactory completion of all year-one and year-two curricula. The purpose of this course is to enhance students' clinical knowledge and skills and provide them opportunities to explore issues that extend across all medical disciplines.

BCC 7201. Residency Preparation Boot Camp (4). This course provides didactic and hands-on activities that reinforce and demonstrate the graduating medical student's competency and preparedness to perform the core patient-care activities of an intern.

BMS 6030r. Foundations Medicine 2: Molecules to Mechanisms (5–10). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine MD program or the FSU College of Medicine Bridge to Clinical Medicine major of the MS Program in Biomedical Sciences. This course covers fundamental concepts in three major areas basic to medicine: cellular structure and function, cell communication, and pharmacology. The course integrates knowledge from across the traditional disciplines in basic, behavioral and clinical sciences. Students incorporate this knowledge in understanding and treating patients as they learn to organize and perform a medical interview within the biopsychosocial model of health care. May be repeated to a maximum of ten semester hours.

BMS 6037r. Medicine I: Foundations (10–13). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine M.D. program or the FSU College of Medicine Bridge to Clinical Medicine major of the M.S. Program in Biomedical Sciences. This course introduces the biopsychosocial model of health care, integrating knowledge of basic, behavioral and clinical sciences for understanding and treating patients. The principles of the patient-centered clinical method provide the context for learning the physical exam, structure and function of the human body, basic diagnostic imaging, and analysis of ethical issues in medicine.

BMS 6040r. Medicine 3 Human Systems in Health and Disease: Gastrointestinal System (6–8). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine MD program. This course provides core knowledge about the structure and function of the human gastrointestinal system and nutrition in health and disease across the lifespan. The course integrates knowledge from across the traditional disciplines in basic, behavioral and clinical sciences and applies that knowledge in understanding and treating patients.

BMS 6041r. Medicine 3 Human Systems in Health and Disease: Host-Defense (6–10). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine MD program. This course covers fundamental concepts of immunology, immunopathology and neoplasia. The course integrates knowledge from across the traditional disciplines in basic, behavioral and clinical sciences and applies that knowledge in understanding and treating patients.

BMS 6042r. Medicine 3 Human Systems in Health and Disease: Cardiovascular and Pulmonary Systems (10–12). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine MD program. This course provides core knowledge about the structure and function of the human cardiovascular and respiratory systems in health and disease across the lifespan. The course integrates knowledge from across the traditional disciplines in basic, behavioral and clinical sciences and applies that knowledge in understanding and treating patients.

BMS 6043r. Medicine 3 Human Systems in Health and Disease: Renal-Urinary System (8–10). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine MD program. This course provides core knowledge about the structure and function of the human kidney and urinary system in health and disease across the lifespan. The course integrates knowledge from across the traditional disciplines in basic, behavioral and clinical sciences and applies that knowledge in understanding and treating patients.

BMS 6044r. Medicine 3 Human Systems in Health and Disease: Hematologic System (4–6). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine MD program. This course provides fundamental medical knowledge of the human hematologic system, with an emphasis on the recognition, diagnosis and treatment of the diseases and disorders that involve it over the lifespan. The course integrates knowledge from across the traditional disciplines in basic, behavioral and clinical sciences and applies that knowledge in understanding and treating patients.

BMS 6045r. Medicine 3 Human Systems in Health and Disease: Autonomic Nervous System, Endocrine, and Reproductive Systems (8–10). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine MD program. This course provides core knowledge about the two principle regulatory systems in the human body, the autonomic nervous system and the endocrine system, and the closely related reproductive system in health and disease. The course integrates knowledge from across the traditional disciplines in basic, behavioral and clinical sciences and applies that knowledge in understanding and treating patients.

BMS 6046Cr. Medicine 3 Human Systems in Health and Disease: Neuroscience: CNS and Behavior (10–12). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine MD program. This course provides a comprehensive overview of the structure and function of the human central nervous system, with emphasis on its role in cognition and behavior across the lifespan, in health and in neurological and psychiatric disease. Dissection laboratory sessions are included. The course integrates knowledge from across the traditional disciplines in basic, behavioral and clinical sciences and applies that knowledge in understanding and treating patients.

BMS 6047r. Medicine 3 Human Systems in Health and Disease: Musculoskeletal and Integumentary Systems (4–6). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine MD program. This course provides an integrated overview of the structure and function of the human musculoskeletal and integumentary systems and the diseases and disorders that involve them over the lifespan. The course integrates knowledge from across the traditional disciplines in basic, behavioral and clinical sciences and applies that knowledge in understanding and treating patients.

BMS 6060r. Health Issues in Medicine II (2). (P/F grade only.) This course provides an introduction to health care, grounding in health policy, health reform, and patient safety. A great deal of attention is devoted to epidemiology and biostatistics, as well as research design, and preventive medicine. The critical appraisal of recent medical literature is also emphasized.

BMS 6204. Medical Biochemistry and Genetics (5). (P/F grade only.) This course develops knowledge and understanding of the basic biochemistry and molecular genetics of normal life processes; biochemical causes, diagnosis and basis of treatment of human diseases; genetic defects and biochemical consequences causing inherited diseases; and advances in biochemistry and genetics that impact future medical practice.

BMS 6301. Medical Microbiology 201 (3). (P/F grade only.) This course covers the basic principles of medical microbiology and infectious disease. Topics include mechanisms of infectious-disease transmission, principles of aseptic practice, the role of the human body's normal microflora, as well as the biology of bacterial, viral, fungal, and parasitic pathogens and the diseases they cause. The course provides relevant clinical experiences and opportunities to develop informatics and diagnostics skills, including the use and interpretation of laboratory tests in the diagnosis of infectious diseases.

BMS 6302. Medical Microbiology 202 (2). (P/F grade only.) This course builds upon the principles learned in BMS 6301 and covers infectious diseases in organ systems in detail. The biological characteristics and pathologic mechanisms of infectious bacteria, viruses, fungi, and parasites are covered. Functional and clinical implications are presented in the form of relevant clinical examples.

BMS 6401. Medical Pharmacology 201 (3). (P/F grade only.) This course covers concepts of pharmacodynamics and pharmacokinetics, emphasizing the biochemical and physiological bases for understanding drug action while introducing many major classes of drugs.

BMS 6402. Medical Pharmacology 202 (4). (P/F grade only.) This course builds upon the principles covered in BMS 6401. Learners study in detail the pharmacologic agents used in treating organ systems disorders. Drug classes, interactions, and specific usages with functional and clinical applications are presented along with relevant clinical examples and the use of therapeutic drug monitoring.

BMS 6511. Organ Physiology (6). (P/F grade only.) Cardiovascular, respiratory, renal and gastrointestinal physiology; physiology of the adrenal and thyroid gland; metabolism.

BMS 6601. Pathology 201 (6). (P/F grade only.) This course provides instruction about basic functions of the immune system and the general mechanisms of human diseases, including immune diseases. Emphasis is placed on the clinical, histopathological, and molecular aspects of diseases. The course also covers specific diseases involving the cardiovascular and respiratory organ systems.

BMS 6602. Pathology 202 (7). (P/F grade only.) This course provides instruction about basic functions of the immune system and the general mechanisms of human diseases, including immune diseases. Emphasis is placed on the clinical, histopathological, and molecular aspects of diseases. The course also covers specific diseases involving the cardiovascular and respiratory organ systems.

BMS 6706C. Clinical Neuroscience (6). (P/F grade only.) The study of clinical neuroscience includes neurophysiology, neuroendocrinology and functional neuroanatomy. This course lays the foundation for future work in neurology and enables students to understand neural function and the nature of neurological disorders.

BMS 6800r. Medicine 4: Integrated Cases (12–14). (P/F grade only.) Prerequisite: Matriculation to FSU College of Medicine MD program. The course focuses on the synthesis of knowledge and skills acquired throughout the previous blocks and clinical experiences and the further development of clinical reasoning. The course prepares the student to begin to contribute meaningfully to real patient care in the workplace during the clinical rotations in Years 3 and 4.

BMS 6801Cr. Medicine 5: Preclerkship Preparation Boot Camp (8–10). (P/F grade only.) Prerequisites: Matriculation to FSU College of Medicine MD program. Student must have taken USMLE Step 1. This course provides students with opportunities to learn and practice basic procedural skills and tasks they use in a variety of health care settings during the clinical rotations in Years 3 and 4. The course prepares the student to begin to contribute meaningfully to real patient care from the first day of their clerkship.

BMS 6821. Medicine and Behavior I (2). (P/F grade only.) This course covers the physiological and social basis of patient and physician behavior and the influence of these factors on health, illness, and the practice of medicine.

BMS 6822. Medicine and Behavior II (2). (P/F grade only.) This course covers the physiological and social basis of patient and physician behavior and the interrelationship between these factors of health, illness, and the practice of medicine. Emphasis is on the application of behavioral principles introduced in BMS 6821 to major health concerns (e.g., obesity, substance abuse, and unhealthy life styles) and chronic illnesses (e.g., diabetes, CHF, cancer, and chronic pain syndromes). Ethical dilemmas and challenges in treating patients for the conditions listed above are discussed. Medical informatics and the use of evidence-based medicine are regularly incorporated in addressing patient-care topics in this course. Physicians' behavior is also addressed as it pertains to coping with uncertainty and dealing with the personal reactions to medical errors.

BMS 6831. Doctoring 201 (7). (P/F grade only.) This course is a component of a three-year longitudinal curriculum aimed to provide the basic knowledge and skills needed to evaluate patients, while, at the same time, emphasizing the importance and integration of behavioral medicine, ethics, information technology, professionalism, clinical reasoning, and systematic physiology.

BMS 6832. Doctoring 202 (7). (P/F grade only.) This course is a component of a three-year longitudinal curriculum aimed to provide the basic knowledge and skills needed to evaluate patients, while, at the same time, emphasizing the importance and integration of behavioral medicine, ethics, information technology, professionalism, clinical reasoning, and systematic physiology.

BMS 6930. Special Topics in Medicine (2). (P/F grade only.) Prerequisite: Admission to the College of Medicine. Course topics may vary.

BMS 6940. Internship/Practicum/Clinical Practice (1). (P/F grade only.) Prerequisite: BMS 6015. Pre- or corequisite: BMS 6017. This is a clinically intensive practicum experience for first-year medical students. Students spend three weeks in approved rural, urban, or geriatric facilities, where they participate in supervised patient care.

BMS 6960r. USMLE Step 1 Preparation (1–6). (P/F grade only.) This course allows time, faculty support, and resources for adequate preparation for the USMLE Step 1 exam through self-directed learning. The course includes a high stakes clinical skills exam that demonstrates preparedness to advance to the clinical clerkships. May be repeated to a maximum of six semester hours.

ENT 5627. Healthcare Innovation and Medical Entrepreneurship (3). This course provides training in the leadership of innovation in patient care delivery. The course allows students to develop and deploy patient-centered solutions that create value by improving both quality and efficiency in their systems and communities.

GMS 5146r. The Immune Response to Infection and Cancer (3). Prerequisites: BMS 5525, PCB 5137, and PCB 5595. This course is an advanced biomedical sciences course for graduate students to introduce the recent developments in the immune response to virus infection and cancer. The course involves lectures and student-driven presentation and discussion. May be repeated to a maximum of six semester hours.

GMS 5700. Developmental Neuroscience (3). This course focuses on the development of the mammalian brain with special attention to issues related to human brain disorders and diseases.

GMS 5905r. Directed Individual Study (1–3). (S/U grade only.) Prerequisite: Instructor permission. Study on a selected topic as designated by the student or directing professor. May be repeated to a maximum of nine semester hours.

IHS 5905r. Directed Individual Study in Health Sciences (1–12). (S/U grade only.) This is a course for graduate students who desire an individualized research experience in Biomedical Sciences, Medical Humanities and Social Sciences, Public Health or other fields represented in the College of Medicine. Students receive laboratory or other training in research methods and improve their readiness for and appreciation of research in health-related science. May be repeated to a maximum of thirty-six semester hours.

MDE 6041r. Elementary Medical Spanish I (1). (P/F grade only.) This course introduces medical students with little or no experience with the Spanish language to vocabulary and grammar related to human health and common diseases. Students begin to develop knowledge and skills important for effective and culturally appropriate communication with Hispanic populations in health care settings.

MDE 6042. Medical Spanish II (2). (P/F grade only.) Prerequisite: MEL 6141. Special emphasis in this course is placed on in-class activities such as interviewing, history taking, and role-playing of brief patient encounters in medical settings. Students have multiple opportunities to practice their Spanish with native speakers.

MDE 7012. Mind-Body Health (0). This course is a ten-week, non-credit elective course designed to improve first- and second-year medical students' health and well-being, by combining yoga and mindfulness techniques with an educational component focusing on scientific research, mind-body medicine and neuroscience.

MDE 7058r. Creativity and Medicine (2-4). This course offers student the opportunity to explore the artistry inherent in the practice of medicine, while fostering their own creative potential in areas ranging from storytelling and poetry to animation, web design, digital imagery or painting, or even game design. May be repeated to a maximum of eight credit hours.

MDE 7106r. Achieving Health Equity-Health Disparities Local and Global (2–4). Educational objectives will be achieved by direct observation/assessment of the student by supervising faculty, summarized on the "Evaluation of Student Performance: elective rotation" form. This course takes a broad approach to share concepts, current issues, and applications in this field embedded in a life course, person and population-centered perspective. Students will share and grow from each other's diverse backgrounds and learning skills in an effort to critically appraise literature focused on identifying and addressing health disparities and tangible measures to achieve health equity.

MDE 7126r. Student Health Elective (2–4). In this course, fourth year medical students spend five days a week at the FSU Health and Wellness Center seeing patients under the supervision of Student Health Center staff to evaluate, diagnose, and treat common illnesses/injuries and provide health care maintenance for patients who present to the Student Health Center. During this rotation, the medical student sees college students of all ages on a continuity and walk-in basis. This rotation is mostly urgent care medicine for the college student population, including but not limited to: sexual health, mental health, infectious diseases, preventative care and initial care of injuries. May be repeated to a maximum of eight semester hours.

MDE 7167. Hospital Based OB/GYN in an At-Risk Population (4). In this course, students participate in all aspects in the hospital management of complicated pregnancies. The rotation is designed to acquaint the learner with care provided by Obstetrical Hospitalists and/or Laborists.

MDE 7572r. Hand Surgery Elective (2–4). Prerequisite: BCC 7160. This course exposes students to recent evidenced-based methods of management of hand-related afflictions. In this course, it is necessary for students to practice and apply physical examination skills of bones and joints and interpret and identify abnormalities of the hand by x-ray studies.

MDE 7642r. Bariatric Surgery Elective (4). Prerequisite: BCC 7160. This course encourages increased student responsibility for the care of patients seen on a daily basis, and to assist the attending physician in the care of these patients, regardless of location. In this course, it is necessary for students to focus entirely on the surgical care and potential complications of patients who are seeking bariatric surgical procedures to improve co-morbidities. May be repeated to a maximum of eight semester hours.

MDE 7645r. Surgical Oncology Elective (4). Prerequisite: BCC 7106 Surgery Clerkship. This elective course focuses on oncology and the use of surgery to treat or cure patients with cancer by exposing students to the work-up and management of gastrointestinal malignancies including: esophageal, gastric, pancreatic, bile duct and liver. Students gain experience in the outpatient clinic setting as well as in the operating room during complex open and robotic procedures.

MDE 7812. Neuropsychology (2). This course helps students to understand the role of neuropsychology and rehabilitation in medicine. The course incorporates practical application of neuropsychology principles and examination in a medical context, neurological rehabilitation, and up-to-date outcomes research analysis.

PAS 5000C. Patient Assessment I (3). Prerequisite: PAS 5022. This course is the first of two courses (PAS 5XXX and PAS 5XXX) that provide the student clinician with the knowledge and skills necessary to complete a thorough assessment of a patient encountered in clinical practice. Students become proficient in patient interviewing, organization, execution and documentation of the physical exam.

PAS 5006. Patient Assessment II (3). Prerequisite: PAS 5000C. This course is second of two courses (PAS 5XXX and PAS 5XXX) that provide the student clinician with the knowledge and skills necessary to complete a thorough assessment of a patient encountered in clinical practice. Students demonstrate proficiency in patient interviewing, organization, execution and documentation of the physical exam.

PAS 5010. Clinical Medicine I (3). Prerequisites: PAS 5022, PAS 5025, and PAS 5045. This course is first in a series of four courses that provide the physician assistant student with a core understanding of the common disease processes encountered in clinical practice. Emphasis is on the recognition, diagnosis, management and prevention of these diseases. Systems discussed in this course include: Endocrine, Gastrointestinal, and Hematologic.

PAS 5013. Evidence Based Practice (1). Prerequisite: Admission to the PA program. This course introduces the student clinician to the principals of evidence-based practice and information utilization. Students learn to critically appraise and interpret information in medical literature and pharmaceutical marketing material.

PAS 5020r. Clinical Medicine II (3). Prerequisites: PAS 5022, PAS 5025, and PAS 5045. This Course is second in a series of four courses that provide the physician assistant student with a core understanding of the common disease processes encountered in clinical practice. Emphasis is on the recognition, diagnosis management and prevention of these diseases. Systems discussed in this course include: Eyes, Ears, Nose, Throat, Dermatologic, Immune and Neurologic.

PAS 5022r. Clinical Gross and Radiographic Anatomy (6). Prerequisite: Admission to the PA program or approval of PA Program Director. This course in human cadaver dissection is designed to provide the student with a fundamental understanding of the structure and function of the human body with an emphasis on the clinical relationship of human anatomy to health and disease. Students participate in lectures, team-based human dissection labs, demonstrations, and discussion of clinical and radiographic anatomy.

PAS 5025. Foundations of Clinical Physiology (2). Prerequisite: Admission to the PA program. This course is first in a series of three physiology/pathophysiology courses that provide the student clinician with a solid foundation in normal human physiology and emphasizes its relationship to cell function, homeostasis and molecular interactions within the human body.

PAS 5028. Systemic Physiology and Pathophysiology I (3). Prerequisite: PAS 5025. This course is second in a series of three physiology/pathophysiology courses (Fundamentals of Physiology and Pathophysiology I/II) that provides the student clinician with a solid foundation in normal and abnormal physiology (pathophysiology). Emphasis is placed on the relationship to cell function, homeostasis and molecular interactions within the human body. Systems covered in this course include: endocrine, gastrointestinal, hematologic, immune and neurologic.

PAS 5029. Systemic Physiology and Pathophysiology II (3). Prerequisite: PAS 5025. This course is third in a series of three physiology/pathophysiology courses (Fundamentals of Physiology and Pathophysiology I/II) that provides the student clinician with a solid foundation in normal and abnormal physiology (pathophysiology). Emphasis is placed on the relationship to cell function, homeostasis and molecular interactions within the human body. Systems covered in this course include: genitourinary/renal, musculoskeletal, cardiovascular and respiratory.

PAS 5030. Clinical Medicine III (3). Prerequisites: PAS 5022, PAS 5025, and PAS 5045. This course is third in a series of four courses that provide the physician assistant with a core understanding of the common disease processes encountered in clinical practice. Emphasis is on the recognition, diagnosis, management and prevention of these diseases. Systems discussed in this course include: Musculoskeletal and Genitourinary.

PAS 5034r. Clinical Medicine IV (3). Prerequisites: PAS 5022, PAS 5025, and PAS 5045. This course is fourth in a series of four courses that provides the physician assistant student with a core understanding of the common disease processes encountered in clinical practice. Emphasis is on the recognition, diagnosis, management and prevention of these diseases. Systems discussed in this course include: Cardiovascular and Pulmonary.

PAS 5045. Integrated Clinical Science (3). Prerequisite: Admission to the PA program. This course provides the student clinician with foundational knowledge in the basic clinical sciences needed throughout the physician assistant curriculum. Emphasis is placed on clinical microbiology, genetics and diagnostic labs that are utilized in the clinical management of health and disease. Prior coursework in microbiology and genetics are required to be successful in this course.

PAS 5050. Essentials of PA Practice (2). Prerequisite: Admissions to the PA program. This course provides the foundational knowledge essential for the entrance into the PA profession. Areas to be discussed include the history of the PA profession, the physician-PA team, professionalism, professional practice issues, certification and licensing, professional development and ethics.

PAS 5056. US Healthcare Systems and Policy (2). Prerequisite: Admission to the PA program. This course is an examination of the U.S. healthcare system, regulations, and policies that affect the delivery of healthcare in the United States.

PAS 5071. Clinical Pharmacology I (2). Prerequisite: Admission to the PA program. This course, in a series of four courses, introduces the student clinician to the basic principles of pharmacology. Students develop an understanding of pharmacokinetics, pharmacodynamics, drug classes and common adverse effects of each drug class.

PAS 5072. Clinical Pharmacology II (2). Prerequisite: PAS 5071. In this course, the second in a series of four courses, students learn to apply pharmacologic agents used in the treatment of disorders encountered during clinical practice. Students focus on drug classes, interactions, functional and clinical applications and monitoring. Groups of drugs discussed in this course include: endocrine, gastrointestinal, hematologic, oncologic, dermatologic, neurologic, antimicrobials and drugs related to the eyes.

PAS 5073. Clinical Pharmacology III (2). In this course, the third in a series of four courses, students learn to apply pharmacological agents used in the treatment of disorders encountered during clinical practice. Students focus on drug classes, interactions, functional and clinical applications and monitoring. Groups of drugs discussed in this course include: musculoskeletal, genitourinary, renal, cardiovascular and pulmonary.

PAS 5074. Clinical Pharmacology IV (1). In this course, the fourth in a series of four courses, students build upon the knowledge gained in the clinical medicine and pharmacology series of courses. Students discuss medications related to pain management, anesthesia, dependence/addiction and toxicology.

PAS 5110L. Health Promotion and Disease Prevention (2). Prerequisite: Admission to the PA program. This course provides the student clinician with the fundamental knowledge and skills to apply the principles of health promotion and disease prevention in the development of a patient-centered management plan to patients in a variety of clinical settings.

PAS 5127. Behavioral and Mental Health (2). Prerequisite: Admission to the PA program. This course provides the physician assistant with a foundation of knowledge and skills necessary to assess and treat common mental health disorders and address psychosocial issues found in clinical practice.

PAS 5254. Foundations of Clinical Nutrition (1). Prerequisite: Admission to the PA program. This course provides an overview of the principles of human nutrition that includes foundational content on the normal physiological and biochemical roles of nutrients, dietary guidelines, nutritional assessment, and the role of diet in health and disease.

PAS 6007. Clinical Procedures (2). Prerequisites: PAS 5010, PAS 5020, PAS 5030, and PAS 5034. This course provides an opportunity for the student clinician to learn and demonstrate proficiency in required procedural skills.

PAS 6053. Professional Development for the PA (1). Prerequisite: Admission to the PA program. This course builds upon the information gained during the didactic and clinical phase of the PA program and prepares the student for graduation, certification, licensure, employment and practice.

PAS 6097. Evidence-Based Research I (2). Prerequisite: PAS 5013. This course, first in a series of three courses, builds upon the information obtained in PAS 5013—Evidence-Based Practice. Students continue their critical appraisal of the medical literature and pharmaceutical marketing materials and develop skills in information utilization and dissemination.

PAS 6098. Evidence-Based Research II (1). Prerequisite: PAS 6097. In this course, the second in a series of three courses, students continue their critical appraisal of the medical literature and pharmaceutical marketing material and refine their skills in developing a clinical question which lays the foundation for the graduate project.

PAS 6099. Evidence-Based Research III (1). Prerequisite: PAS 6098. In this course, the final course in a series of three courses, students continue their critical appraisal of the medical literature and pharmaceutical marketing material and refine their skills in developing and answering a clinical question and leads to the completion of their graduate project.

PAS 6190. Internal Medicine Clerkship (5). Prerequisite: PAS 6941. This clerkship is designed to provide the physician assistant student with a six week supervised clinical practice experience (SCPE) in an inpatient and office based Internal Medicine practice. Students work with a qualified preceptor and provide care to patient populations across the lifespan that present with acute and chronic conditions as well as those seeking preventative care.

PAS 6200. General Surgery (2). Prerequisites: PAS 5010, PAS 5020, PAS 5030, and PAS 5034. This course introduced the student to the principles of general surgery. Students continue to develop their critical thinking skills, learn to and manage patients in a general surgical practice. Students develop competency in suturing, basic surgical techniques, procedure and asepsis.

PAS 6291. General Surgery Clerkship (5). Prerequisite: PAS 6941. This clerkship is designed to provide the physician assistant student with a six week supervised clinical practice experience (SCPE) in General Surgery. Students work with a qualified preceptor in a general surgical setting with an emphasis in pre-operative, intra-operative, and post-operative care.

PAS 6303. Pediatric Medicine (2). Prerequisites: PAS 5010, PAS 5020, PAS 5030, and PAS 5034. This course introduces the student to the principles of pediatric medicine. Students continue to develop their critical thinking skills and learn to identify and manage common medical and surgical conditions that affect the pediatric patient. Special emphasis is placed on the importance of communication with patients and families as well as injury and disease prevention.

PAS 6390. Pediatric Medicine Clerkship (5). Prerequisite: PAS 6941. This rotation is designed to provide the physician assistant student with a six week supervised clinical practice experience (SCPE) in Pediatric Medicine. Students work with a qualified preceptor in a pediatric medicine setting providing care to pediatric patients with acute and chronic conditions as well as those seeking preventative healthcare.

PAS 6490. Family Medicine Clerkship (6). Prerequisite: PAS 6941. This clerkship is designed to provide the physician assistant student with a six week supervised clinical practice experience (SCPE) in Family Medicine under the direct supervision of a qualified preceptor. Students provide care to patient populations across the lifespan that present with acute and chronic conditions as well as those seeking guidance on preventative healthcare.

PAS 6491. Geriatric Medicine Clerkship (3). Prerequisite: PAS 6941. This clerkship is designed to provide the physician assistant student with a four week supervised clinical practice experience (SCPE) in Geriatric Medicine. Students work with a qualified preceptor in a practice that emphasizes the geriatric patient. Attention is placed on characteristics of aging, end of life care, assisted living, nursing care, elder abuse, health promotion and maintenance as well as obstacles to care commonly encountered in the geriatric population.

PAS 6492r. Behavioral and Mental Health Clerkship (5). Prerequisite: PAS 6941. This clerkship is designed to provide the physician assistant student with a six week supervised clinical practice experience (SCPE) in Behavioral and Mental Health setting under the direct supervision of a qualified preceptor. Students develop a solid foundation in the fundamentals of the evaluation, diagnosis, treatment, and appropriate referral of patients with mental health disorders.

PAS 6505. Women's Health (2). Prerequisites: PAS 5010, PAS 5020, PAS 5030, and PAS 5034. This course introduces the student to the principles of women's health. Students build on the knowledge obtained during the clinical medicine course series and continue to develop their critical thinking skills and learn to identify and manage common medical and surgical conditions that affect the female patient.

PAS 6591. Women's Health Clerkship (5). Prerequisite: 6941. This rotation is designed to provide the physician assistant student with a four week supervised clinical practice experience (SCPE) in Women's Health. Students work with a qualified preceptor in a clinical setting with an emphasis in women's health providing care to patient populations across the lifespan that present with acute and chronic conditions as well as those seeking preventative healthcare in gynecology and obstetrics.

PAS 6605. Emergency Medicine (3). Prerequisites: PAS 5010, PAS 5020, PAS 5030, and PAS 5034. This course introduces the student to the principles of emergency medicine. Students continue to develop their critical thinking skills and learn to identify and manage common medical and surgical conditions that present to the emergency department.

PAS 6876r. Emergency Medicine Clerkship (3). Prerequisite: PAS 6941. This rotation is designed to provide the physician assistant with a four week supervised clinical practice experience (SCPE) in Emergency Medicine. Students work with a qualified preceptor in an emergency department setting providing care to patient populations across the lifespan that present with acute and chronic conditions as well as those seeking preventative healthcare.

PAS 6941. Transition to Clinical Practice (4). Prerequisites: PAS 5010, PAS 5020, PAS 5030, and PAS 5034. This course guides the physician assistant student through their transition from the classroom to the clinic. Emphasis is placed on the assessment, diagnosis and the practical application of therapeutics to patient-centered clinical practice.

PAS 6945. Elective Clerkship (3). Prerequisite: PAS 6941. This clerkship is designed to provide the physician assistant student with a four week supervised clinical practice experience (SCPE) in a specialty selected by the student. Students work with a qualified preceptor in the selected specialty and provide care to specific patient populations that present with acute and/or chronic conditions.

PSB 5347. Molecular Neuropharmacology (3). This course provides an in-depth description of basic principles in pharmacology and the cellular and molecular bases of drug effects in the central nervous system.

Graduate Department of MODERN LANGUAGES AND LINGUISTICS

COLLEGE OF ARTS AND SCIENCES

Website: <https://www.modlang.fsu.edu/>

Chair: Reinier Leushuis; **Associate Chair (Graduate Studies):** Howard; **Associate Chair (Undergraduate Studies):** Sunderman; **Professors:** Boutin, Galeano, Leushuis, Munro, Pietralunga, Poey, Sunderman; **Associate Professors:** Alvarez, Cappuccio, Efimov, Gomariz, Gonzalez, Howard, Lan, Lee, Leaser, Maier-Katkin, Muntendam, Reglero, Romanchuk, Soldat-Jaffe, Valisa, Wakamiya, Wang, C. Weber, Zanini-Cordi; **Assistant Professors:** Bumatay, Coggeshall, Goldmark, Hulstyn, Joos, Mewhinney, Murray-Roman, Qian, A. Weber; **Assistant Teaching:** Schlenoff; **Teaching Faculty III:** Feng, Osborn; **Teaching Faculty II:** Brandl, Brudenell, Guitierrez, Labbiidi, Prantil, Prosper; **Teaching Faculty I:** Bartlett, Gibson, Malo

The department offers graduate and undergraduate students unique opportunities for language and culture study. From language classes in a variety of languages, to degree programs in areas including French, German, Italian, Slavic, and Spanish; the department prepares students for a variety of educational and future career opportunities. The teaching and research expertise of the department's faculty reflects the commitment to FSU's undergraduate and graduate students and to academic excellence. The Department of Modern Languages and Linguistics has been offering graduate work in French and Spanish since 1917. During the 1950s, master's programs were initiated in German and Slavic (Russian), as well as Doctor of Philosophy (PhD) programs, first in Spanish, then in French. The master's program in Italian studies was inaugurated in 1999. Graduate programs leading to the Master of Arts (MA) are available in East Asian Languages and Cultures (Chinese and Japanese tracks), French, German, Italian Studies, Slavic languages and literature (emphasis on Russian), and Spanish. Programs leading to the PhD degree are offered in French and Spanish.

Winthrop-King Institute for Contemporary French and Francophone Studies:

Supported by a generous bequest from the late Mrs. Ada Belle Winthrop-King, Florida State University's Winthrop-King Institute for Contemporary French and Francophone Studies is a center for interdisciplinary scholarship on France and the French-speaking world. Through its program of distinguished guest speakers, visiting professors, and conferences, together with undergraduate and graduate awards, the Institute offers outstanding opportunities for students, scholars and researchers who share the passion of Mrs. Winthrop-King for France, its civilization and language, and the wider French-speaking world. Through the Institute undergraduate and graduate scholarships are also available for study and research abroad.

Admission Requirements

The following items are required for applying to any one of the Department's graduate programs:

1. the University graduate application (see <https://admissions.fsu.edu/gradapp>);
2. a statement of purpose (in English);
3. a writing sample written in the target language of the program for which the candidate is applying (EALC candidates can provide a writing sample in English);
4. three letters of recommendation;
5. GRE scores (verbal and quantitative) including for international students. Average Verbal Reasoning scores for applicants the Department has accepted in the last five years have been around 155;
6. GPA of 3.0 or higher as an upper division student;
7. TOEFL scores (for international students whose native language is not English);
8. two hardcopies of transcripts from all colleges/universities attended and/or from which the student received a degree.

The official departmental deadline for applications for a regular Fall admission is January 15. The department does not grant Spring semester admissions. For further practical details on graduate studies in the Department of Modern Languages and Linguistics, including the availability of funding, please see the departmental Graduate Studies Handbook available on the Department's website.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Requirements for the Master of Arts (MA) in East Asian Languages and Cultures

The MA degree in East Asian Languages and Cultures is expected to be completed in two years during which the student must successfully complete a minimum of 36 credit hours (at least 21 of these credit hours must be taken on a letter-grade basis). A minimum of 12 credit hours must be language courses. There are two primary tracks within the EALC MA program: Chinese and Japanese. For each track, the student must take 4 language courses in their designated primary language area (Chinese or Japanese, for a minimum of 12 credit hours, native speakers of Japanese or Chinese might fulfill this requirement with the other program language), as well as East Asian Humanities (3 credit hours). During the final semester of coursework, the student should take the Advanced Seminar in East Asian Languages and Cultures (3 credit hours) to complete a significant research project guided by the student's research supervisor. All required courses must be taken on a letter-grade basis.

In addition, students will also take 18 credit hours of elective courses. These courses should be graduate courses in the East Asian MA program.

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Requirements for the Master of Arts (MA) in French Master of Arts (MA) in French Literature

Requirements for the MA in French Literature include coursework, comprehensive examinations, and a twenty to thirty-page research paper. A minimum of thirty-two semester hours in graduate courses (including minor, if any) must be earned and at least twenty-one of these must be taken for a letter grade. The MA degree program normally takes two years but may be completed in as little as one year.

Required courses include a distribution of coursework across the centuries. Francophone literature can be substituted for any century course. In choosing their courses, students should be advised that many currently advertised positions require knowledge of critical theory and Francophone literature. Courses are not offered as exam preparation; rather, coursework provides the basis for the student to further synthesize and expand their knowledge during exam preparation.

Master's Comprehensive Examination: The examination will take place in the third and/or second to last week of the Fall or Spring semester and is based on courses taken by the candidate and on an MA reading list. In the minor field, if any, the questions will be on coursework only. The student will take a total of four comprehensive exams (not including an exam in a minor field, if any), each lasting a maximum of four hours, covering three main periods: 1) Medieval/Renaissance, 2) seventeenth to eighteenth century, 3) nineteenth to twentieth century. Three of the exams must be written in French; one must be written in English. The student will choose one of these areas as the area of specialization. Only in this area will the student take **two** exams, covering both sub-fields of the area **and** write his/her research paper in the primary field of interest within that area. If any part of the written examination is considered marginal by any member of the committee, an oral exam may be required. The oral exam will be scheduled approximately one week after the written portion.

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Master of Arts (MA) in French with a Concentration in Contemporary French and Francophone Studies

Requirements for the MA in French with a Concentration in French and Francophone Studies include coursework, comprehensive examinations, and a twenty to thirty-page research paper. A minimum of thirty-two semester hours in graduate courses (including minor, if any) must be earned and at least twenty-one of these must be taken for a letter grade. The program normally takes two years but may be completed in as little as one year.

Required courses include twenty-one credit hours (seven courses) in French. At least twelve credit hours (four courses) must be chosen from among those offered in twentieth century or Francophone Studies, with a further nine credit hours (three courses) chosen from among other courses in French. In choosing other French courses, students are advised to consider the benefits of courses such as Critical Theory.

Master's Comprehensive Exam: The student will take a total of four comprehensive exams in French (plus an additional exam on the minor field, if any), each lasting a maximum of four hours, and a will write a twenty to thirty-page research paper on an aspect of contemporary French and Francophone studies. Three of the exams must be written in French; one must be written in English. The four (or five) exams are structured as follows: 1) on two contemporary French and Francophone courses (four hours); 2) on two other contemporary

French and Francophone courses (four hours); 3) on two other French courses (four hours); 4) on any other French course(s) (up to four hours); 5) (only for students taking a minor) on the minor field (up to four hours) If any part of the written examination is considered marginal by any member of the committee, an oral exam may be required. The oral exam will be scheduled approximately one week after the written portion.

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Requirements for the Master of Arts (MA) in German Studies

Requirements for the MA in German Studies include course work, a substantial research paper, and a written comprehensive examination. The MA in German Studies is expected to be completed in two years.

Course Work: A minimum of 30 semester hours in graduate courses (including Minor, if any) must be earned. Of these, at least 24 must be taken for a letter grade and 21 from courses with German or FOL course numbers. All regularly enrolled German MA students, employed as Teaching Assistants in the German program, are required to sign up for at least six credit hours of German course work per semester. (Exceptions need the approval of the German program's Graduate Student Adviser.)

Research Paper: At the end of the last semester (by week 8) students are required to submit the final version of a substantial research paper (around 20 pages in length). This is an extended course paper directed by the major professor who offered the course. The paper can be written in English or German. It will be reviewed by at least two German faculty members, one being the major professor and at least one other German faculty member identified by the student. An oral defense may be scheduled. If any faculty member considers revisions necessary, they can be requested and shall be satisfied within a period of two weeks.

The Comprehensive Examination will be on six courses with German/FOL course numbers taken in the MA program at Florida State University. Questions will be specific in nature and are expected to elicit substantial critical responses of the essay type. The exams will be written in two periods of four hours each (normally on consecutive days). An oral examination, approximately one week after the written portion, is required when the student has failed one or more sections of the written examination.

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Requirements for the Master of Arts (MA) in Italian Studies

The MA in Italian studies is an interdisciplinary program with core courses in Italian correlated with graduate courses from related area(s) of interest. Related areas might include: Art, Art History, Classics, Communications, Economics, English, Entrepreneurship, Film, History, Humanities, Interior Design, International Affairs, Music, Philosophy, Political Science, Religion, Theatre, and Urban and Regional Planning.

The student must complete a minimum of thirty-two semester hours of coursework. At least twenty-one of these hours must be taken on a letter-grade basis. The core courses in Italian will include three semester credit hours in Italian Culture and Civilization (ITA 5505) and six semester hours of credit in Italian literature or language courses at the 5000 level or above.

Master's Comprehensive Examination: The examination is based on courses taken by the candidate and additional individualized readings prepared in collaboration with specific professors. Members of the examining committee will be chosen by the student and the division coordinator. MA examination questions are expected to elicit substantive critical essays. Questions will be written within a period of nine hours (normally in three periods of three hours on consecutive days). An oral examination, approximately one week after the written portion, is required when the candidate has failed one or more sections of the written examination.

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Requirements for the Master of Arts (MA) in Russian (Slavic)

Two types of master's degree programs are available, the **thesis**-type and the **course**-type. The thesis-type program requires a minimum of thirty semester hours including at least six hours of thesis credit and either Introduction to Critical Theory (FOW 5025) or Introduction to Theories of SLA (LIN 5932). At least eighteen of these hours must be taken on a letter-grade basis. In the course-type program, a minimum of thirty-two semester hours is required, and at least twenty-one of these hours must be taken on a letter-grade basis.

Master's Comprehensive Examination: In the **thesis**-type program, the student must successfully complete an oral comprehensive examination. In the **course**-type program, the student must successfully complete a comprehensive examination consisting of both written and oral portions. The comprehensive exam is designed as a field examination. The written exam will cover the courses an individual student has taken. The oral examination covers the same fields as the written examination. For students who have written a thesis as part of their program, the oral examination also constitutes the thesis defense.

MA Thesis: Students who choose the thesis-type program need to take their MA Comprehensive Examination as described above. The student must constitute an MA Supervisory Committee made up of the student's major professor, one minor professor (if any), and two other faculty members. All of those must hold Graduate Faculty Status. The composition of the Supervisory Committee must be communicated to the Graduate Program Coordinator or to the Associate Chair for Graduate Studies for registration with the Graduate School no later than the second week of classes in the semester the student intends to graduate. The student must also enroll in SLL 5971, Thesis, and submit a thesis to the Supervisory Committee that reveals independent investigation and knowledge of the methods of scholarship within the major field. The student must register for SLL 8976, Thesis Defense, in the semester the defense is to take place. The thesis must be submitted to the Supervisory Committee at least ten days before the oral defense of the thesis. The initial version of the thesis must also be submitted to the Graduate School's Manuscript Clearance Advisor by the Initial Format Submission Deadline of the semester they intend to graduate (check "GradSpace"). After approval by the oral examining committee, the student should submit the final version of the thesis electronically (the so-called "ETD" format) to the Graduate School's Manuscript Clearance Advisor by the Final Manuscript Submission and Forms Deadline of the semester in which they intend to graduate (check "GradSpace").

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Requirements for the Master of Arts (MA) in Spanish

For the MA in Spanish, students may choose either a thesis-type program or a course-type program. For the **thesis**-type program, the student must complete a minimum of thirty semester hours of credit including thesis credit. At least eighteen of these hours must be taken on a letter-grade basis (A, B, C). The minimum/maximum number of thesis hours for completion of a master's degree shall be six hours. For the **course**-type program, the student must complete a minimum of thirty semester hours of coursework. At least twenty-one of these hours must be taken on a letter-grade basis (A, B, C). For both the thesis and course-type MAs in Spanish, students may choose from three tracks for specialization: 1) Iberian and Latin American Literatures and Cultures; 2) Linguistics; and 3) Linguistics and Literature. Regardless of specialization, all students must complete LIN 5744 Introduction to Language, Language Learning, and Language Instruction (3) during the Fall semester of their first year. Upon recommendation by the graduate advisor, graduate students may be required to take SPN 5900, Advanced Spanish Composition and Translation (3), which will not count toward the course-area requirement but will count toward the hour requirements for graduation. No graduate credit can be transferred from another school to count toward the MA degree at FSU. In general, undergraduate courses taken at FSU will not apply toward graduate credit. However, on approval by the minor professor (see below Master Comprehensive Examination), some courses at the 4000-level (no more than six semester hours) may be counted toward the minor field of the MA degree.

Specialization in Iberian and Latin American Literatures and Cultures

Students pursuing the track in Iberian and Latin American Literatures and Cultures must complete a minimum course requirement of five courses in various areas. At least two of these courses must be in Iberian Literatures and Cultures (from different time periods, such as Medieval Literature, Golden Age, 18th and 19th Centuries, and 20th and 21st Centuries) and two in Latin American Literatures and Cultures (from different time periods, such as Colonial, 19th Century, and 20th and 21st Centuries). Courses corresponding to each area can be found on the Spanish program's website. In addition, all students must complete SPW 6806, Research Methods and Bibliography in Literary and Cultural Studies (3).

Specialization in Hispanic Linguistics

Students pursuing the track in Hispanic Linguistics must complete a minimum course requirement of five courses in various areas. At least two of these courses must be in Formal Linguistics (in areas such as Spanish Phonetics and Phonology, Spanish Syntax, and History of the Spanish Language) and two in Applied Linguistics (in areas such as Psycholinguistics, Second Language

Acquisition, and Sociolinguistics). Courses corresponding to each area can be found on the Spanish program's website. In addition, all students must complete LIN 5932, Quantitative Research Methods in Language Studies (3).

Specialization in Language and Literature

Students pursuing the track in Language and Literature must complete a minimum course requirement of five courses in various areas. At least one course must be in Iberian Literatures and Cultures, one in Latin American, one in Formal Linguistics, and one in Applied Linguistics. In addition, all students must complete either SPW 6806, Research Methods and Bibliography in Literary and Cultural Studies (3), or LIN 5932, Quantitative Research Methods in Language Studies (3).

Master's Comprehensive Examination (for both thesis-type and course-type program)

The examination in the Literatures and Cultures areas is based on coursework and the MA reading lists; in Linguistics the examination is based on coursework and reading lists prepared in consultation with the examining professor(s). The Examination Panel will be composed of all Spanish and Portuguese program faculty members from the corresponding areas with Graduate Faculty Status, as well as the minor professor (if any) who must also hold Graduate Faculty Status. The Comprehensive Examination will cover three areas from the areas listed above for each specialization. Each area will be covered in one exam. Students in the specialization in Iberian and Latin American Literatures and Cultures must take at least one exam in Iberian and one exam in Latin American literature and cultures. Similarly, students in the specialization in Hispanic Linguistics must take at least one exam in Formal and one exam in Applied Linguistics. Students in the specialization in Linguistics and Literature must take at least one exam in Linguistics and one exam in Literature. If the student does not pass one area on the MA examination, upon request the student will be reexamined on that area during a later regular examination period. If the student does not pass two or more areas, the entire examination must be retaken at a subsequent regular examination period. In the event all areas are not passed after the second examination, the student is no longer eligible to be in the program.

MA Thesis

Students who choose the thesis-type program need to take their Master's Comprehensive Examination as described above. For the thesis, the student needs to constitute an MA Supervisory Committee made up of a major professor, two other faculty members from the Division of Spanish and Portuguese, and the minor professor (if any). The composition of the Supervisory Committee must be communicated to the Graduate Program Coordinator or to the Associate Chair for Graduate Studies for registration with the Graduate School no later than the second week of classes in the semester that the student intends to graduate. All members of the Supervisory Committee must hold Graduate Faculty Status. A prospectus of the thesis must be approved by the Supervisory Committee before registering for SPW 5971, Thesis. It is the responsibility of the major professor to supervise the preparation of the prospectus and the thesis. A copy of this prospectus, bearing the signatures of all committee members, must be submitted by the student for inclusion in the student's folder. The student must register for SPW 8976, Thesis Defense in the semester the defense is to take place. Copies of the thesis must be submitted to the Supervisory Committee at least two weeks before the Oral Defense of the thesis. The initial version of the thesis must also be submitted to the Graduate School's Manuscript Clearance Advisor by the Initial Format Submission Deadline of the semester they intend to graduate (check "GradSpace"). After approval by the oral examining committee, the student should submit the final version of the thesis electronically (the so-called "ETD" format) to the Graduate School's Manuscript Clearance Advisor by the Final Manuscript Submission and Forms Deadline of the semester in which they intend to graduate (check "GradSpace").

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Requirements for the Doctor of Philosophy (PhD) in French

The Doctor of Philosophy in French is a research degree designed to foster mastery of the language together with advanced knowledge and analytical and critical skills in appropriate areas of French and Francophone studies. The student is expected to become familiar with past and current achievements in the field and demonstrate the ability for original scholarly research.

Course requirements: A minimum of three academic years of graduate study (at least sixty semester hours) beyond the baccalaureate degree (or equivalent) is normally required in the doctoral program. Credits acquired

at the master's level count towards this. On progressing beyond the master's level, candidates for a PhD in French will be expected to take ten three-credit courses and thereby fulfill requirements in three categories, consisting of four, four, and two courses respectively as follows: a major/minor category that will consist of four courses, a Distribution category (see below) that will consist of four courses, and two courses in an unrelated field that will serve as an Elective category. Although students will be required to adhere to the four-four-two pattern in fulfilling the requirements, there is considerable flexibility in the exact choice of courses. Some courses may help to fulfill requirements in more than one category (e.g. both the "major/minor" and "Distribution" categories), thus enabling students to take additional courses in areas of particular interest to them while remaining within the ten-course total overall. Course selection will be made by the student in consultation with the major advisor and the program's graduate advisor.

Major/minor requirements: In fulfilling these requirements, students will typically take two to three courses in the major and one to two courses in the minor.

Distribution requirements: Students will be required to take four courses across the fields represented by the French faculty. Specifically, students will be required to take two pre-1800 courses and two post-1800 courses to be determined in consultation with the major advisor and the graduate advisor. Courses taken to satisfy the distribution requirement can also be counted toward the major or minor. By the same token, additional courses could be taken in the major/minor or distribution fields while respecting the ten-course total overall.

Unrelated Field (Electives): Based on the overlapping four-four-two distribution system, two of the student's courses will be in unrelated fields, hence electives. In choosing electives students should keep in mind the need for intellectual coherence. No more than two courses can be taken outside of the department, and all courses in the first semester must be taken within the department. If acceptable to the Graduate Advisor, some courses on the 4000-level in both the major and minor field may be counted as graduate credit toward the PhD degree provided no comparable 5000-level course is available. No more than six semester hours of 4000-level courses in French may be counted towards the degree and no more than six semester hours of 4000-level courses may be taken in the minor field without the permission of the Graduate Advisor. The doctoral student is expected to include two 6000-level courses.

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Language Requirement: Prior to the Doctoral Preliminary Examination, the student must demonstrate reading knowledge in one language other than French and English which is germane to the research in the student's proposed specialty area. The language is determined in consultation with the Graduate Advisor and the major professor. The requirement can be satisfied 1) by passing the Reading Knowledge Examination offered for several languages by the Department of Modern Languages and Linguistics (such as SPA 5069, GER 5069, etc.); or 2) by completing a 2200-level course in that language with a grade of B or better; or 3) through documentary evidence of the candidate's personal experience in and exposure to the language, for instance by having accomplished a period of work in the language, or by having resided during a substantial period in a country where the language is widely used. In the latter case, the Graduate Advisor and major professor determine whether the evidence is sufficient or if further assessment of competence is needed, and of what nature. Courses taken in high school do not satisfy the requirement. The language requirement must be satisfied before taking the Preliminary Examination.

Doctoral Supervisory Committee: Five faculty members constitute the preferred minimum, four faculty members the required minimum. The Supervisory Committee shall include the major professor, minor professor and a University Representative, who may also be the minor professor, and an additional two or three other faculty members from the French faculty. All of the minimum constituency of the Supervisory Committee must hold Graduate Faculty Status and three of them - major Professor, Representative of the Graduate Faculty, as well as one other member - must hold Doctoral Directive Status. The University Representative must be a tenured professor. The Graduate Advisor will approve the composition of the student's proposed Supervisory Committee and forward the list to the Graduate Program Coordinator or to the Associate Chair for Graduate Studies who will register the committee with the Graduate School. The definite composition of the Supervisory Committee has to be communicated to the Graduate School no later than the second week of classes in the semester that the student intends to graduate.

Doctoral Preliminary Examination: The examination is prepared by the Supervisory Committee in coordination with the Major Professor. The Doctoral Preliminary Examination will take place in the third or second to last week of the Spring semester. It will consist of four essay-style questions each to be answered in an in-class written exam taking place in a four-hour time slot on four separate days during the course of one week. The four questions

will be: 1) on the dissertation topic (in the major area); 2) on the minor area; 3) on the unrelated field; and finally 4) on a subject satisfying the distribution requirement or, if this has already been satisfied, a further question on the major area or a question on another field in which the student has taken courses. **If any one question of the written examination is considered unsatisfactory by any member of the committee, an oral exam may be required to reexamine the student in that area.** If the student does not pass two or more questions, the entire written examination must be retaken at least four months after the original examination. In the event all questions are not passed after the second examination, the student is no longer eligible to be in the program. All requirements for the doctorate must be completed within five calendar years from the time the student passes the Preliminary Examination or the exam must be repeated. The formal status of candidate for the doctoral degree (the so-called "ABD" status) is granted after the student has passed the Doctoral Preliminary Exam and an "admission to candidacy" form has been filed with the Office of the University Registrar (please see the Graduate Program Coordinator for this form). No student can register for dissertation hours prior to the point in the semester in which the preliminary examination was passed. After completion of the "admission to candidacy" process, a student may retroactively add dissertation hours for that semester, but only if the preliminary examination was passed by the **end of the seventh week of the semester.** A minimum lapse of at least six months between achieving "admission to candidacy" and the granting of the PhD degree is required.

Prospectus of Dissertation: After completing the Preliminary Examination but no later than the end of the semester following the Preliminary Examination, the candidate must submit an acceptable Prospectus of Dissertation to the Supervisory Committee and orally defend the prospectus. The Committee members must receive the prospectus two weeks in advance of the oral defense of the prospectus. A copy of the Prospectus bearing the approval signatures of all the members of the committee must be submitted by the student for inclusion in the student's file. If the student does not successfully defend the prospectus the first time, he/she will have a one semester probationary period to re-defend the prospectus before termination from the program.

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Dissertation: The doctoral Dissertation must be on a topic connected with the major field and must constitute a significant research contribution to knowledge. The candidate must register for FRW 6980r, Dissertation, during each term in which he or she works substantially with the Supervisory Committee or uses the research facilities of Florida State University (minimum of two dissertation hours per term). The student must be registered for at least two semester hours of dissertation during the term in which the defense is held. A minimum of twenty-four semester hours of FRW 6980r for credit is required. There is no fixed limit for the maximum. In case the dissertation research concerns human subjects, the student must include a copy of the IRB (Institutional Review Board) Approval Letter and sample copies of any Informed Consent Forms in the appendices of his/her manuscript. For more information see "GradSpace" (or "Grad School - Faculty/Staff").

Oral Defense of Dissertation: The student must register for FRW 8985, Dissertation Defense, in the semester the defense is to take place. Copies of the dissertation with an abstract of 350 words must be submitted to the Supervisory Committee at least **four weeks** before the Oral Defense of the dissertation. Responsibility for suggesting the date, time, and place of the oral defense of the dissertation rests with the major professor. Further requirements for the oral defense, as well as the submission of the dissertation to the Graduate School's Manuscript Clearance Adviser, are entirely those imposed by the Graduate School. Please check "GradSpace" for further details. The date, time, and place of the Oral Defense of Dissertation must be announced by memo from the major professor at least two weeks in advance to the Supervisory Committee, the Candidate, the Coordinator and the Advisory Board, the Associate Chair for Graduate Studies, the Chair of the Department of Modern Languages and Linguistics, the Dean of the College, and the Dean of Graduate Studies.

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Requirements for the Doctor of Philosophy (PhD) in Spanish

A minimum of thirty semester hours of graduate credit in Spanish and/or approved related fields beyond the MA degree at or above the 5000 level is normally required in the doctoral program. The two tracks for specialization are: A) Iberian and Latin American Literatures and Cultures (Early, Modern, Contemporary); and B) Language and Linguistics, (Formal Linguistics, Applied Linguistics, Second Language Acquisition).

Minimum area requirements for students in the Iberian and Latin American Literatures and Cultures track are: twelve hours in the major area, six in the secondary area, three in the remaining area, and nine for electives.

Minimum area requirements for students in the Language and Linguistics track are: six hours in Linguistic Theory, three in Applied Linguistics (sociolinguistics, psycholinguistics, etc.), six in Second Language Acquisition, six in Research Methods and Statistics, and nine for electives.

All coursework should be arranged with the Graduate Advisor or, after the first year at the latest, with the major professor. Courses taken for the MA degree may be used to satisfy this distribution requirement. Permission from the Spanish and Portuguese program is required to use courses taken for the BA to satisfy this requirement. All PhD candidates are also required to take: LIN 5932 Quantitative Research Methods in SLA (3) (only for linguistics specialists); LIN 5744 Introduction to Language, Language Learning, and Language Instruction (3); FOW 5025 Critical Theory and Its Applications to Non-English Literatures (3) (only for literature specialists).

These courses should be taken as early in the student's program as possible and must be taken before the Preliminary Examination. After students have earned the MA degree in Spanish or thirty semester hours of graduate credit in Spanish, they must spend on the Florida State University campus a period of continuous enrollment of at least twenty-four graduate semester hours of credit in any period of twelve consecutive months.

Language requirement: The language requirement for the doctoral degree consists of reading knowledge in two languages other than Spanish and English which are germane to research in the student's proposed specialty area (one language if the language is not a Romance language, such as Russian or Chinese, and the student demonstrates advanced proficiency as indicated by coursework or a degree). The student's Supervisory Committee determines which languages are germane. The requirement can be satisfied by 1) passing the reading knowledge examination offered by the Department of Modern Languages and Linguistics (FRE 5069, GER 5069, etc.) or 2) completing a 2200-level course with a grade of "B" or better. Courses taken in high school do not satisfy the requirement. The language requirement must be satisfied before taking the Preliminary Examination.

Doctoral Supervisory Committee: The Supervisory Committee will consist of a minimum of four members with Graduate Faculty Status. It will consist of the major professor and at least two members of the Spanish graduate faculty, plus a University Representative who must be a tenured professor, and the minor professor (if any). The University Representative may also be the minor professor. Any other members of the Committee will be chosen from the Spanish faculty and must have Graduate Faculty Status. The committee must include a representative from each area in which the student is to be examined on the Preliminary Examination. The Graduate Advisor will approve the composition of the student's proposed Supervisory Committee and forward the list to the Graduate Program Coordinator or to the Associate Chair for Graduate Studies who will register the committee with the Graduate School. The composition of the Supervisory Committee has to be communicated to the Graduate School no later than the second week of classes in the semester that the student intends to graduate.

Doctoral Preliminary Examination: Before taking the preliminary examination, the student must have a Major Professor and Supervisory Committee, an approved Program of Studies form, have completed the language requirement, and have taken any required courses (see above).

The **PhD examination in Iberian and Latin American Literatures and Cultures** will consist of three sections. Two parts will be from the following areas of specialization: Early, Modern, and Contemporary. The third part of the examination will be on the student's dissertation topic. In consultation with the major professor, the student will create a substantive reading list for the dissertation area. The examination questions, based on this reading list, will relate generally to the dissertation topic. If the student has a minor or certificate area and wishes an examination in that area, it is the student's responsibility to find a professor from that area who will prepare and grade the questions. The minor area or certificate examination will be in addition to the three examinations required in Spanish. The exam format is to be determined by the Major Professor and will either be an in-class written exam or a take-home written exam. The in-class exam is a twelve-hour examination consisting of four hours on three separate days during the course of one week. Questions should be written in consultation with all faculty members with expertise in the area. Questions will be specific in nature and may include identifications, essays, problem-solving questions, etc. The use of a dictionary is not permitted during the in-class exam. Each take-home exam will be completed over the course of a week (seven days). All three take-home exams must be taken within a one-month period. If any part of the written examination is considered marginal by any member of the committee, an oral exam may be required. Moreover, if the student does not pass one area on the written examination, the student will be reexamined in that area upon request. If the student does not pass two or more

areas, the entire written examination must be retaken at least four months after the original examination. In the event all areas are not passed after the second examination, the student is no longer eligible to be in the program.

The **PhD examination in the Language and Linguistics track** will consist of three sections to be determined in consultation with the major professor. Possible areas include: Formal Linguistics, Applied Linguistics, Second Language Acquisition, and Dissertation Topic. The examination questions will be based on reading lists and coursework. The exam format is to be determined by the major professor and will either be an in-class written exam or a take-home written exam. The in-class exam is a twelve-hour examination consisting of four hours on three separate days during the course of a week. Questions should be written in consultation with all faculty members with expertise in the area. Questions will be specific in nature and may include identifications, essays, problem-solving questions, etc. The use of a dictionary is not permitted during the in-class exam. Each take-home exam will be completed over the course of a week (seven days). All three take-home exams must be taken within a one month period. If any part of the written examination is considered marginal by any member of the committee, an oral exam may be required. Moreover, if the student does not pass one area on the written examination, the student will be reexamined in that area upon request. If the student does not pass two or more areas, the entire examination must be retaken at least four months after the original examination. In the event all areas are not passed after the second examination, the student is no longer eligible to be in the program.

All requirements for the doctorate must be completed within five calendar years from the time the student passes the Preliminary Examination or the exam must be repeated. The formal status of candidate for the doctoral degree (the so-called "ABD" status) is granted after the student has passed the written and oral portions of the Preliminary Examination and an "admission to candidacy" form has been filed in with the Office of the University Registrar (please see the Graduate Program Coordinator for this issue). No student can register for dissertation hours prior to the point in the semester in which the preliminary examination was passed. After completion of the "admission to candidacy" process, a student may retroactively add dissertation hours for that semester, but only if the preliminary examination was passed by the end of the seventh week of the semester. A minimum lapse of at least six months between achieving "admission to candidacy" and the granting of the PhD degree is required.

Prospectus of Dissertation: After completing the Preliminary Examination but no later than by the end of the semester following the Preliminary Examination, the candidate must submit an acceptable Prospectus of Dissertation to the Supervisory Committee and orally defend the prospectus. The committee members must receive the prospectus two weeks in advance of the oral defense. A copy of this Prospectus bearing the approval signatures of all the members of the committee must be submitted by the student for inclusion in the student's file. If the student does not successfully defend the prospectus the first time, he/she will have a one semester probationary period to re-define the prospectus before termination from the program.

Dissertation: The Dissertation must be on a Hispanic topic and must constitute a significant research contribution to knowledge. The student must register for two hours of SPN 6980, Dissertation, every term in which he/she uses the resources of FSU. A minimum of twenty-four semester hours of SPN 6980 credit is required. In case the dissertation research concerns human subjects, the student must include a copy of the IRB (Institutional Review Board) Approval Letter and sample copies of any Informed Consent Forms in the appendices of his/her manuscript. For more information see "GradSpace" (or "Grad School - Faculty/Staff").

Oral Defense of Dissertation: The student must register for SPW 8985, Dissertation Defense in the semester the defense is to take place. Copies of the dissertation with an abstract of 350 words must be submitted to the Supervisory Committee at least **four weeks** before the Oral Defense of the dissertation. Responsibility for suggesting the date, time, and place of the oral defense of the dissertation rests with the major professor. Further requirements for the oral defense, as well as the submission of the dissertation to the Graduate School's Manuscript Clearance Adviser, are entirely those imposed by the Graduate School. Please check "GradSpace" for further details.

Please see the departmental Graduate Studies Handbook available on the Department's website for further details.

Definition of Prefixes

ASN—Asian Studies

CHI—Chinese

CHT—Chinese Culture in Translation or Translation Skills

FOL—Foreign Languages

FOT—Foreign Language (In Translation)

FOW—Foreign Languages, Comparative Literature (Writings)
FRE—French Language
FRT—French Culture in Translation or Translation Skills
FRW—French Literature (Writings)
GER—German
GET—German Culture in Translation or Translation Skills
GEW—German Literature (Writings)
HUM—Humanities
ITA—Italian Language
ITW—Italian Literature (Writings)
JPN—Japanese
JPT—Japanese Culture in Translation or Translation Studies
JPW—Japanese Literature (Writings)
LIN—Linguistics
POR—Portuguese Language
POW—Portuguese Literature (Writings)
RUS—Russian Language
RUT—Russian Culture in Translation or Translation Skills
RUW—Russian Literature (Writings)
SEC—Serbo-Croatian Language
SLL—Slavic Languages
SPN—Spanish Language
SPW—Spanish Literature (Writings)

Graduate Courses

NOTE: For the most current information on course numbers, prefixes, titles, and content, please always check the departmental website at <https://www.modlang.fsu.edu> or the Class Search at <https://my.fsu.edu>.

Chinese

Advanced Undergraduate Courses

Note: Graduate students must obtain permission of the Chinese coordinator and associate chair for graduate studies to take these courses for credit.

CHI 4400r. Chinese-English Translation (3). Prerequisite: CHI 3422. This course introduces students to basic concepts of translation theory, and helps them to obtain fundamental skills and techniques in Chinese-English translation.

CHI 4410r. Advanced Chinese I (3). Prerequisite: Two CHI 3000-level courses or instructor permission. This course is designed for students who have had three years of Chinese language courses or equivalent learning experience. Students study both advanced-level language skills and Chinese culture in the original language. May be repeated to a maximum of six semester hours.

CHI 4411r. Advanced Chinese II (3). Prerequisite: One 4000-level course with the CHI or CHW prefix. This course aims to develop fluency and accuracy in advanced-level Chinese in using complex vocabulary and sentence patterns, grasping basic forms of expository and argumentative prose, and discussing real-life issues of contemporary China both in writing and conversation. May be repeated to a maximum of six semester hours.

CHI 4503. Readings in Chinese History (3). Prerequisite: Instructor permission. This course introduces a sketch of Chinese history. Students are taught to read the text in Chinese so they can expand their vocabulary to include those words necessary to understand Chinese culture and tradition.

CHI 4855r. Introduction to Classical Chinese (3). Prerequisites: Two 3000-level Chinese language courses, or instructor permission. This course introduces students to the grammar, vocabulary, and style of classical Chinese. It also helps students who desire to read modern Chinese texts in the formal, professional, and academic styles.

CHI 4905r. Directed Individual Study (3). In this course, students arrange with individual faculty members to undertake specialized study in areas outside of or in addition to the regular curriculum. May be repeated to a maximum of six semester hours.

CHI 4930r. Special Topics (3). Prerequisite: Divisional permission. This course allows students to study literary topics of a special kind, depending on student interest and faculty expertise. May be repeated to a maximum of nine semester hours.

Graduate Courses

CHI 5505r. Reading in Chinese Literature (3). Prerequisite: Instructor permission. This course is to help those students whose interest is focused on literature. Students may choose a particular author from either ancient or modern time and do a thorough analysis of his or her works. Students may also choose a certain field or period and do extensive reading in that field or period. May be repeated to a maximum of six semester hours.

CHI 5856r. Classical Chinese (3). This course introduces students to the grammar, vocabulary, and style of classical Chinese, by reading, translating, and analyzing authentic writings that embody Chinese cultural traditions. It also helps students who desire to read modern Chinese texts in the formal, professional, and academic styles. Students are also expected to review major publications on learning classical Chinese.

CHI 5906r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

CHI 5910r. Supervised Research in Chinese (1–5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

CHI 5940r. Teaching Practicum (0–5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

CHT 5935r. Studies in Premodern Chinese Literature and Culture (3). This course allows students to study special topics on premodern Chinese literature and culture. May be repeated to a maximum of nine (9) semester hours within the same term.

French

Advanced Undergraduate Courses

Note: *Graduate students must obtain permission of the French coordinator and associate chair for graduate studies to take these courses for credit.

French Language

FRE 4410.* Advanced Conversation (3). This course is about oral expression, listening skills, and vocabulary acquisition in French with a variety of domains, using contemporary materials.

FRE 4422.* Advanced Grammar and Composition (3). Prerequisite: FRE 3421 or equivalent. This course, intended for students with a thorough grounding in French grammar, aims at developing writing and speaking ability through the reading of a variety of sophisticated French prose works and the compositions of essays based on these model texts.

FRE 4905r. Directed Individual Study (3). In this course, students arrange with individual faculty members to undertake specialized study in areas outside of or in addition to the regular curriculum. May be repeated to a maximum of six semester hours.

FRE 4930r.* Special Topics (3). Prerequisite: Divisional coordinator permission. This course allows students to study literary topics of a special kind, depending on student interest and faculty expertise. May be repeated to a maximum of nine semester hours.

French and Francophone Literatures, Cultures and Civilizations

FRW 4420.* Medieval and Renaissance Literature (3). Prerequisite: FRW 3100. This course is an introduction to the poetry and prose of the medieval and early-modern periods. Emphasis is on the themes of love and friendship.

FRW 4433.* 17th- and 18th-Century Literature (3). Prerequisite: FRW 3100 or FRW 3101. This course surveys major works in the areas of theater, philosophy, and prose fiction. Special attention is given to the possible meanings of concepts such as Classicism and Enlightenment.

FRW 4460.* 19th-Century Literature (3). Prerequisite: FRW 3101. This course focuses on major themes and issues in 19th-century literature and culture.

FRW 4480.* 20th-Century Literature (3). Prerequisite: FRW 3101. This course is a survey of the major works (novel, theater, poetry) and movements of 20th-century French literature.

FRW 4761r. Studies in Francophone Literatures and Cultures (3). Prerequisite: FRW 3100 or FRW 3101. This course is an examination of selected aspects of cultural forms (books, film, music, etc.) associated with one or more French-speaking region located outside France, including North Africa, West Africa, the Antilles, Quebec, Indo-china, and French-speaking islands in the Indian and Pacific oceans. May be repeated to a maximum of six semester hours.

FRW 4770r.* Francophone Caribbean/African Cultures (3). Prerequisite: FRW 3101. This course examines the literature of Africa and the Caribbean written in French with an emphasis on Negritude and/or Creolite. May be repeated to a maximum of six semester hours.

Graduate Courses

French and Francophone Language and Culture

FRE 5060. Graduate Reading Knowledge in French (3). (S/U grade only). This course is designed to present structures of the French language and vocabulary to prepare graduate students majoring in other disciplines to read learned journals, books, and monographs written in French useful for the student's research in humanities, natural or social sciences.

FRE 5069r. Reading Knowledge Examination (0). (S/U grade only). This course is a translation examination to ascertain the student's ability to read research materials written in French. Use of translation software is prohibited.

FRE 5505r. French and Francophone Cultures (3). Prerequisite: Graduate standing. This course covers developments in France and in the wider Francophone (French-speaking) world since the Second World War. The course explores the institutions of the Fifth Republic, the evolution of ideas since May 1968, and the emergence of new artistic movements in France. The course also examines the rise of Francophone cultures in the former colonies in Africa, the Caribbean, and elsewhere. May be repeated to a maximum of six semester hours.

FRE 5535. Post-Colonial Cultures in France (3). This course examines the new cultural practices being forged in France by writers, filmmakers and musicians mixing elements from African, Caribbean, French, American and other sources. It is taught in French.

FRE 5755. Old French (3). In this course, the primary objectives are to acquire a reading knowledge of the language and to learn basic concepts concerning its structure and development.

FRE 5756. Readings in Old French Language (3). Prerequisite: FRE 5755. This course is a diachronic study of short works written in Old French. The goal is to introduce students to major genres and authors and to increase their reading knowledge of the language.

FRE 5900r. Studies in French Language and Literature (3). This course varies in content as student's needs are addressed. May be repeated to a maximum of nine semester hours.

FRE 5940r. Teaching Practicum (0–5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

French Literature in Translation

FRT 5555. Immigration and National Identity in France (3). This interdisciplinary course examines the ways in which immigration and ethnicity have been reshaping the contours of contemporary French society and culture. It is taught in English.

French and Francophone Literatures, Cultures and Civilizations

FRW 5415. Old French Literature I (3). Prerequisite: FRE 5755. Recommended prerequisite: FRE 5756. This course is a study of works in Old French organized around a specific topic.

FRW 5419r. Studies in Medieval French Literature: Figure or Genre (3). Prerequisite: FRE 5755. Recommended prerequisite: FRE 5756. This course is a study of a major medieval author or genre. May be repeated to a maximum of six semester hours.

FRW 5586r. Studies in 16th-Century Literature: Figure or Movement (3). This course is a study of the prose other than Rabelais and Montaigne alternates with an examination of the theater and poetry of the period. If interest warrants, a single author such as Marguerite de Navarre may be treated in depth. May be repeated to a maximum of six semester hours.

FRW 5587r. Studies in 17th-Century Literature: Figure or Movement (3). This course focuses on a major figure (e.g., Pascal) or intellectual-religious movement (e.g., Jansenism) or a genre (e.g., novel, poetry), depending on the semester. May be repeated to a maximum of six semester hours.

FRW 5588r. Studies in 18th-Century Literature: Figure or Movement (3). In this course, material alternates between preromanticism and enlightenment. May be repeated to a maximum of six semester hours.

FRW 5595r. Studies in 19th-Century French Literature (3). This course is a critical or thematic approach to the literature and culture of 19th-Century France. May be repeated to a maximum of six semester hours as content varies.

FRW 5599r. Studies in 20th-Century Post-War (1940 to the present) French Literature: Figure or Movement and/or Genre (3). This course covers post-WWII literary movements in the novel, theatre and poetry. Authors studied include Michel Butor, Albert Camus, Samuel Beckett, Jean Cocteau, Henri Michaux, and others. May be repeated to a maximum of six semester hours.

FRW 5765r. Studies in Francophone Literatures and Cultures (3). Prerequisite: Graduate standing. This course is an examination of selected aspects of cultural forms (books, film, music, etc.) associated with one or more French-speaking region located outside France, including North Africa, West Africa, the Antilles, Quebec, Indochina, and French-speaking islands in the Indian and Pacific oceans. May be repeated to a maximum of six semester hours.

FRW 5775r. Francophone Caribbean/African Cultures (3). Prerequisite: Graduate standing. This course examines the literature of Africa and the Caribbean written in French with an emphasis on Negritude and/or Créolité. May be repeated to a maximum of six semester hours.

FRW 5906r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

FRW 5910r. Supervised Research in French (1–5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

FRW 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

FRW 6938r. Graduate Seminar in French Literature (3). May be repeated to a maximum of nine semester hours.

FRW 6980r. Dissertation (1–12). (S/U grade only). A minimum of twenty-four semester hours is required for the PhD.

FRW 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

FRW 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

FRW 8976. Master's Thesis Defense (0). (P/F grade only.)

FRW 8985r. Dissertation Defense (0). (P/F grade only.)

General Foreign Language Courses

ASN 5216. Advanced Seminar in East Asian Languages and Cultures (3). Prerequisite: Divisional Coordinator permission. This course, focused around a significant research project, prepares advanced MA students regarding professional research expectations, critical methods, and issues in East Asian languages and cultures.

ASN 5825r. East Asian Humanities (3). This course in Asian Humanities is designed as a continuous conversation with selected major historical, religious, philosophical, and literary works from East Asian traditions. Texts covered in the course, although formed and transmitted in the particular historical, geographical, and cultural contexts of East Asia starting about three millennia ago, nonetheless invite students to join in and carry on their discussions concerning general and common human conditions and issues that are still inevitably encountered in the present world. May be repeated to a maximum of six semester hours.

FOL 5934r. Problems and Studies in Modern Languages and Literature (3). May be repeated to a maximum of nine semester hours.

FOT 5805. Translation Theory and Practice (3). In this course, students analyze and engage with theories and practice of translation. Enrollment limited to graduate students.

FOW 5025. Critical Theory and Its Application to Non-English Literatures (3). This course introduces graduate students to critical theories and their application to non-English literary texts. Members of the Department of Modern Languages and Linguistics and invited faculty from other University departments team teach.

FOW 5595. Transnational Literature (3). This course considers contemporary literature and film in the context of recent economic, social, and cultural debates about globalization. Readings and discussions are in English.

FOW 6907r. Directed Readings (1–6). (S/U grade only). Prerequisite: Instructor or major professor permission. This course is for master and doctoral students in the Department of Modern Languages needing to fulfill credit hours that are not part of the regular course requirements, or of DIS and/or Research hours offered in their respective programs. To be used for instance for MA and PhD Prelim exam preparation.

HUM 5938r. Interdisciplinary Topics (3). This course provides students from any discipline with an integrated interdisciplinary learning experience. The course is taught by instructors from at least two different departments and/or colleges. Topics vary. May be repeated to a maximum of eighteen semester hours.

German

Advanced Undergraduate Courses

Note: *Graduate students must obtain permission of the German coordinator and associate chair for graduate studies to take these courses for credit.

GER 4420.* Advanced Composition (3). Prerequisite: Two 3000-level GER courses or instructor permission. In this course, the objective is to gain the ability to write with a developed personal style in German on intellectually demanding topics, including commentary on literature. Near mastery of German grammar is a prerequisite. The course is conducted in German.

GER 4480.* Modern German of the News Media (3). Prerequisite: Two 3000-level GER courses or instructor permission. This course is an advanced-level skills course. Discussion of current events and mass media in German-speaking countries and work with authentic texts (newspapers and audio-visual material).

GER 4905r. Directed Individual Study (3). In this course, students arrange with individual faculty members to undertake specialized study in areas outside of or in addition to the regular curriculum. May be repeated to a maximum of six semester hours.

GET 4800.* Translation German-English/English-German (3). Prerequisite: GER 3400 or instructor permission. This course is an advanced-level skills course. Translating a variety of texts that illustrate important distinctions between German and English grammar, syntax, vocabulary, etc.

GEW 4591r.* Studies in an Author or Theme (3). Prerequisites: Two 3000-level courses or instructor permission. This course offers the opportunity to study either a single author in-depth or to follow a specific theme that may extend over a brief period or over centuries. Course material may include non-literary textual and audio-visual material. May be repeated to a maximum of nine semester hours.

GEW 4592r.* Studies in a Period or Movement (3). Prerequisites: Two 3000-level courses or instructor permission. This course concentrates on a specific literary movement such as Romanticism, Realism, Expressionism, or on a period such as the Baroque, the Enlightenment, or the Weimar period. May be repeated to a maximum of nine semester hours.

GEW 4930r. Special Topics (3). Prerequisites: Two 3000-level courses or instructor permission. In this course, students arrange with individual faculty members to undertake study in areas outside the regular curriculum. May be repeated to a maximum of nine semester hours.

Graduate Courses

German Language

GER 5060. Graduate Reading Knowledge in German (3). (S/U grade only). This course is designed to present structures of the German language and vocabulary to prepare graduate students majoring in other disciplines to read learned journals, books, and monographs written in German useful to the student's research in humanities, natural or social sciences.

GER 5069r. Reading Knowledge Examination (0). (S/U grade only). This translation examination is to ascertain the student's ability to read research materials written in German. Use of translation software is prohibited.

GER 5425. Essay Workshop (3). For this course, the objective is the ability to write in German at a level that approximates native use of the language for advanced cultural discourse in general and literary commentary in particular. The workshop setting is designed for collaborative learning through discussions of various styles in existing texts, for the purposes both of recognizing stylistic properties of different types of texts and of selecting styles for the student's own uses, and through collective critiques of the fellow student's writings. The course is conducted in German.

GER 5906r. Studies in German Language and Literature (3). In this course, the topic is determined by student and the faculty member directing the project. May be repeated to a maximum of nine semester hours.

GER 5940r. Teaching Practicum (0-5). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

GER 6925r. Tutorial in Professional Issues (0-2). (S/U grade only). Prerequisite: GER 5940 or instructor permission. This course offers advanced professional preparation to acquaint students with issues of concern in their academic discipline. A maximum of three hours may count toward the degree. May be repeated to a maximum of nine semester hours.

German Literature (Writings)

GEW 5208r. Studies in a Genre (3). This course is a study of German literature through generic approaches.

GEW 5595r. Studies in a Theme (3). This course offers the opportunity to follow a specific theme that may extend over a brief period or over centuries. Course material is often supplemented by audio visuals. May be repeated to a maximum of nine semester hours.

GEW 5596r. Studies in an Author or Movement (3). In this course, either the works of an individual author or a number of authors composing a specific movement are read. Course materials are frequently supplemented with films, videos, and recordings. May be repeated to a maximum of six semester hours.

GEW 5597r. Studies in a Period: Special Topics (3). In this course, an understanding of a certain period or movement investigated is determined by the student's needs and by faculty expertise. May be repeated provided the course materials are different from previous materials presented under the course title. Examples of period literatures are 17th century and Post World War II literature in a comprehensive approach. Examples of movement literatures are Romanticism and Expressionism, literatures that are concurrent with other types of literature at a given time period. The course is conducted in German. Verbal participation (class discussion and/or reports) and written participation (examination and/or term paper) are required. May be repeated to a maximum of six semester hours.

GEW 5906r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

GEW 5915r. Supervised Research (1-5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

GEW 5971r. Thesis (1-6). (S/U grade only). A minimum of six semester hours is required.

GEW 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

GEW 8976r. Master's Thesis Defense (0). (P/F grade only.)

German Literature in Translation

GET 5135. German Literature in Translation (3).

GET 5525r.* German Cinema (3). This course studies the contextual and stylistic features of German cinema from its classical period in the 1920s to the recent New German Cinema of the 1970s. Focus is on methods of film analysis and film criticism. May be repeated to a maximum of six semester hours.

GET 5588r. Studies in a Theme (3). This course offers students the opportunity to study a recurring theme in German literature and culture (e.g., the Faust theme). The course may be structured around a specific interest of the teacher on topical issues and concerns. May be taken by students not majoring in German who read assigned materials in translation. May be repeated to a maximum of six semester hours.

Italian

Advanced Undergraduate Courses

Note: *Graduate students must obtain permission from the Italian coordinator and associate chair for graduate studies to take these courses for credit.

Italian Language

ITA 4410.* Advanced Italian Conversation (3). Prerequisites: ITA 2240. This course is designed to develop fluency in conversation skills at the fourth-year level by means of extensive vocabulary building and practice.

ITA 4450.* Advanced Italian Composition and Style (3). Prerequisite: ITA 3421 or equivalent. This course stresses the morphological and syntactical order of Italian by means of extensive drill in controlled and free composition.

ITA 4500.* Italian Culture and Civilization (3). Prerequisites: ITA 3100 and ITA 3101, or equivalent. This course surveys Italian culture and civilization and provides a historical perspective to aspects of Italian society.

ITA 4905r. Directed Individual Study (3). For this course, students arrange with individual faculty members to undertake specialized study in areas outside of or in addition to the regular curriculum. May be repeated to a maximum of six hours.

ITA 4930r. Special Topics (3). Prerequisite: Divisional coordinator permission. This course allows students to study literary topics of a special kind, depending on student interest and faculty expertise. May be repeated to a maximum of nine semester hours.

ITA 4935r. Honors Work (3). This course may be repeated to a maximum of nine semester hours, three hours of which may be applied to the requirements for the major with permission of the department. All honors work is directed by the students' honors committee.

Italian Literature (Writings)

ITW 4400.* Renaissance Literature (3). Prerequisites: ITW 3100 and ITW 3101, or equivalent. This course offers selected readings and discussions of the literature of the Italian Renaissance including such figures as Alberti, Lorenzo deMedici, Poliziano, Machiavelli, Michelangelo, Ariosto, and Tasso.

ITW 4440r.* 18th- and 19th-Century Literature (3). Prerequisites: ITW 3100 and ITW 3101, or equivalent. This course offers readings and discussions of figures and movements of the 18th and 19th centuries including Goldoni, Alfieri, Foscolo, Manzoni, Leopardi, and Verga. May be repeated to a maximum of six semester hours.

ITW 4480.* 20th-Century Literature (3). Prerequisites: ITW 3100 and ITW 3101, or equivalent. This course offers readings and discussions of figures and movements in 20th century Italian literature.

ITW 4481.* Readings in Contemporary Italian Prose (3). Prerequisites: ITW 3100 and ITW 3101, or equivalent. This course offers readings and discussions of works of contemporary Italian writers.

Graduate Courses

Italian Language

ITA 5060. Graduate Reading Knowledge in Italian (3). (S/U grade only). This course is designed to present structures of the Italian language and vocabulary to prepare graduate students majoring in other disciplines to read learned journals, books, and monographs written in Italian useful for the student's research in humanities, natural or social sciences.

ITA 5069r. Reading Knowledge Examination (0). This translation examination is to ascertain the student's ability to read research materials written in Italian. Use of translation software is prohibited.

ITA 5455r. Advanced Italian Composition and Style (3). Prerequisite: Advanced standing. This course stresses the morphological and syntactical order of Italian by means of extensive drills in controlled and free composition. Theme writing at the advanced level. May be repeated to a maximum of nine semester hours.

ITA 5505r. Italian Culture and Civilization (3). Prerequisite: Advanced standing. This course surveys Italian culture and civilization and provides a historical perspective to aspects of Italian society. May be repeated to a maximum of nine semester hours.

ITA 5900r. Studies in Italian Language and Literature (3). Prerequisite: Fourth-year level language and/or literature courses. This course provides specialized study of topics, figures, and movements. May be repeated to a maximum of nine semester hours.

ITA 5940r. Teaching Practicum (0-5). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

ITA 8966. Master's Comprehensive Exam (0). (P/F grade only.) This examination is based on the Modern Language Association reading lists and represents the five areas of specialization.

Italian Literature (Writings)

ITW 5415r. Italian Renaissance Literature (3). Prerequisite: Advanced standing. This course offers selected readings and discussions of the literature of the Italian Renaissance including such figures as Alberti, Lorenzo de Medici, Poliziano, Machiavelli, Michelangelo, Ariosto, and Tasso.

ITW 5445r. 18th- and 19th-Century Italian Literature (3). Prerequisite: Advanced standing. This course offers advanced readings and discussions of the figures and movements of the 18th and 19th centuries, including Goldoni, Alfieri, Foscolo, Manzoni, Leopardi, and Verga. May be repeated to a maximum of six semester hours.

ITW 5485r. 20th-Century Italian Literature (3). Prerequisite: Advanced standing. This course offers advanced readings and discussions of figures and movements in 20th-century Italian literature, including Moravia, Svevo, Pirandello, Silone, and others. May be repeated to a maximum of nine semester hours.

ITW 5486r. Readings in Contemporary Italian Prose (3). Prerequisite: Advanced standing. This course offers advanced readings and discussions of the works of contemporary Italian writers, including Pavese, Cassola, Sciascia, Berto, Ginzburg, Tomasi di Lampedusa, Buzzati, Vittorini, and Viganò. May be repeated to a maximum of nine semester hours.

ITW 5505. Italiane, italiani! – Gender in Italian Culture (3). This class explores modern Italian culture by discussing texts, movies, and social events from the standpoint of their gender politics.

ITW 5705r. The Trecento Writers (3). Prerequisite: Advanced standing. This course offers an advanced study of the Trecento writers: Dante, Petrarca, Boccaccio and others. Advanced readings and discussions are available in both English and Italian. May be repeated to a maximum of nine semester hours.

ITW 5905r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

ITW 5910r. Supervised Research in Italian (1–5). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

Japanese

Advanced Undergraduate Courses

Note: Graduate students must obtain permission of the Japanese coordinator and associate chair for graduate studies in order to take these courses for credit.

JPN 4905r. Directed Individual Study (3). In this course, students arrange with individual faculty members to undertake specialized study in areas outside of or in addition to the regular curriculum. May be repeated to a maximum of six semester hours.

JPN 4930r. Special Topics (3). Prerequisite: Divisional coordinator permission. This course allows students to study literary topics of a special kind, depending on student interest and faculty expertise. May be repeated to a maximum of twelve semester hours.

JPW 4551r. Translating Modern Japanese Literature (3). Prerequisites: JPN 4413 and instructor permission. This course focuses on reading and translating contemporary Japanese fiction and essays. It is targeted toward advanced language students as they transition from being students of Japanese to being proficient readers of Japanese. Students read texts in the original Japanese from a wide variety of authors in order to develop the skills and confidence needed to tackle written Japanese as it is published and read in Japan today. May be repeated to a maximum of six semester hours.

Graduate Courses

JPN 5900r. Studies in Japanese Language and Literature (3). Prerequisite: JPN 3230 or equivalent. This course is designed to introduce advanced Japanese syntax and to expose students to graded materials in the humanities and social sciences. The primary objective is to help students to gain a good insight into the intricacies of the Japanese language and culture and to develop adequate translation skills. May be repeated to a maximum of nine semester hours.

JPN 5906r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

JPN 5915r. Supervised Research (1–5). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

JPN 5940r. Teaching Practicum (0–5). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

JPT 5935r. Special Topics (3). This course allows students to study literary or cultural topics of a special kind, depending on student interest and faculty expertise. May be repeated to a maximum of nine (9) semester hours within the same term.

JPW 5300r. Traditional Japanese Literature (3). This course offers a panoramic overview of Japanese literature from its beginnings through the classical, medieval, and early modern periods, up to the late 19th century. Students read the fundamental works of traditional Japanese literature in the original Japanese (using didacticized editions).

JPW 5400. Life-Writing in Japan (3). This course explores the theory, history, and practice of life-writing (roughly speaking, the recording of personal experiences) in Japan. This course focuses on various texts—including autobiographies, biographies, and memoirs, as well as diaries, letters, and oral histories—in the original Japanese.

Linguistics

Advanced Undergraduate Courses

Note: *Graduate students must obtain permission of the linguistics coordinator and associate chair for graduate studies to take these courses for credit.

LIN 4030. Introduction to Historical Linguistics (3). This course is designed to familiarize students with the world language families, notion of relatedness, sound correspondence, comparative method, internal reconstruction, and the reconstruction of the Proto-Indo-European languages. Several theories of sound change are also discussed.

LIN 4040. Introduction to Descriptive Linguistics (3). This course attempts to develop an understanding of the organization of language, to provide tools and techniques for describing language data, and to examine various models of linguistic description. May count toward the major in Slavic (Russian) and Spanish.

LIN 4905r. Directed Individual Study (3). In this course, students arrange with individual faculty members to undertake specialized study in areas outside of or in addition to the regular curriculum. May be repeated to a maximum of six semester hours.

LIN 4930r. Topics in Linguistics (3). In this course, students arrange with individual faculty members to undertake study in areas outside the regular curriculum. May be repeated to a minimum of twelve semester hours. May be repeated within the same semester.

Graduate Courses

LIN 5035. Historical/Comparative Linguistics (3). This course parallels in breadth, but not in depth, the reading and other assigned work of the undergraduate course involving sound change, possible causes of sound change, several different theories of sound change, and other controversial problems.

LIN 5045. Descriptive Linguistics (3). This course parallels in breadth, but not in depth, the reading and other assigned work of the undergraduate course concerned with the scientific study of human language, analytic methods, and models of linguistic description.

LIN 5050. East Asian Linguistics (3). This course introduces important phonological, morphological, syntactic and other linguistics features of the Chinese and Japanese languages. The course also covers cognitive and neurophysiological profile in the processing of Chinese and Japanese sentences.

LIN 5305. Patterns of Sounds (3). Prerequisite: Prior completion of LIN 5215 is strongly recommended. This course explores the patterning of sounds across languages from a typological and theoretical perspective. It shows how sounds are organized in various prosodic domains, from syllables and feet to phonological words and phrases, and introduces the main frameworks used for phonological analysis: generative phonology; auto-segmental phonology; and constraint-based phonological approaches.

LIN 5510. Transformational Grammar (3). This course covers, in addition to the fundamentals of transformational grammar, more current developments in linguistic theory, such as X-bar syntax, Government and Binding, Relational Grammar, etc.

LIN 5744. Introduction to Language, Language Learning, and Language Instruction (3). This course provides an overview to the nature of language and how languages are learned. Furthermore, using insights from second language acquisition, the course explores current approaches to communicative, task-based language instruction.

LIN 5908r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

LIN 5910r. Supervised Research (1–5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

LIN 5932r. Topics in Linguistics (3). In this course, different topics are selected to suit the needs and interests of students. A special effort is made to select topics related to current theoretical and practical issues. May be repeated to a maximum of twelve semester hours.

Portuguese (Brazilian)

Advanced Undergraduate Courses

POR 4905r. Directed Individual Study (3). In this course, students arrange with individual faculty members to undertake specialized study in areas outside of or in addition to the regular curriculum. May be repeated to a maximum of six semester hours.

POR 4930r. Special Topics (3). Prerequisite: Divisional coordinator permission. This course allows students to study literary, cultural, or linguistic topics of a special kind, depending on student interest and faculty expertise. May be repeated to a maximum of nine semester hours.

Graduate Courses

POR 5069r. Graduate Reading Knowledge Examination: Portuguese (0). (S/U grade only). This course consists of a translation examination to ascertain the student's ability to read research materials written in Portuguese. Use of translation software is prohibited.

POR 5930r. Studies in Portuguese (Brazilian) Language and Literature (3). May be repeated to a maximum of nine semester hours.

POR 5940r. Teaching Practicum (0–5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

POW 5905r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

POW 5910r. Supervised Research in Portuguese (1–5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

Russian

Advanced Undergraduate Courses

Note: *Graduate students must obtain permission of the Slavic coordinator and associate chair for graduate studies to take these courses for credit.

RUS 4410r.* Advanced Russian Conversation and Composition (3–6). Prerequisite: RUS 3400. This course focuses on the styles and levels of oral expression on a wide range of topics. May be repeated to a maximum of six semester hours.

RUS 4421.* Advanced Russian Grammar and Composition (3). Prerequisite: RUS 3420. This course focuses on the practical application of advanced language skills.

RUS 4780.* Phonetics (3). Prerequisite: RUS 2220 or instructor permission. This course provides an understanding of the phonetic and phonemic structure of Russian with extensive oral practice.

RUS 4840.* History of the Russian Literary Language (3). Prerequisite: RUS 3400. This course studies the development of the phonological and grammatical systems from the earliest records to the present.

RUS 4905r. Directed Individual Study (3). In this course, students arrange with individual faculty members to undertake specialized study in areas outside of or in addition to the regular curriculum. May be repeated to a maximum of six semester hours.

RUS 4930r. Special Topics (3). May be repeated to a total of twelve semester hours. Only three semester hours taken in any Summer session count towards the major.

RUS 4935r. Honors Thesis (1–6). May be repeated to a maximum of nine semester hours, three hours of which may be applied to the requirements for the major with permission of the department. All honors work is directed by the student's honors committee.

RUW 4470r. Modern Russian Literature (3). Prerequisites: RUW 3100 and RUW 3101, or equivalent. This course studies the great works of major Russian writers of the 19th and 20th centuries, encompassing study of specific movements such as Romanticism, Realism, Modernism and Socialist Realism. May be repeated to a maximum of nine semester hours.

Graduate Courses

Russian Language

RUS 5069r. Reading Knowledge Examination (0). (S/U grade only). This course is a translation examination to ascertain the student's ability to read research materials written in Russian. Use of translation software is prohibited.

RUS 5415r. Graduate Russian Conversation and Comprehension (3). (S/U grade only). This course consists of extensive conversation and comprehension practice on contemporary themes. May be repeated once for credit to a maximum of six semester hours. Not open to native speakers of Russian.

RUS 5845. History of the Russian Language and Reading of Old Russian Texts (3). This course focuses on the development of the phonological and grammatical systems from the earliest written records to the present.

RUS 5940r. Teaching Practicum (0–5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

RUS 6925r. Tutorial in Professional Issues (0–2). (S/U grade only). Prerequisite: RUS 5940 or instructor permission. This advanced professional preparation course serves to acquaint students with issues in their academic discipline. A maximum of three semester hours may count toward the degree. Course may be repeated to a maximum of nine semester hours.

Russian Literature in Translation

RUT 5115. Seminar: Russian Literature in English Translation (3). This course focuses on classics of Russian 19th- and 20th-century prose. No Russian required.

Russian Literature (Writings)

RUW 5335. Russian Poetry (3). This course studies the development of poetry, the major writers, and their representative works.

RUW 5375. Russian Short Story (3). This course studies the development of the short story in the 19th and 20th centuries, the major writers, and their representative works.

RUW 5559r. Seminar in 19th-Century Russian Literature (3). This course studies the development of Russian literature through its golden age and of the representative works of Pushkin, Lermontov, Gogol, Turgenev, Goncharov, Leskov, Tolstoy, Dostoevsky, and Chekhov. May be repeated to a maximum of nine semester hours.

RUW 5579. Modern Russian Literature (3). This course studies the development of 20th-century literature from Modernism through the Soviet period to the glasnost era.

RUW 5906r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

RUW 5910r. Supervised Research in Russian (1–5). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

RUW 5930r. Special Topics (3). May be repeated to a maximum of nine semester hours.

Slavic

Advanced Undergraduate Courses

Note: Graduate students must obtain permission of the Slavic coordinator and associate chair for graduate studies to take these courses for credit.

SLL 4905r. Directed Individual Study (3). This course allows students to arrange with individual faculty members to undertake specialized study in areas outside of or in addition to the regular curriculum. May be repeated to a maximum of six semester hours.

Graduate Courses

SLL 5906r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

SLL 5915r. Supervised Research (1–5). (S/U grade only). For this course, a maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

SLL 5971r. Thesis (3–6). (S/U grade only). This course requires a minimum of six semester hours.

SLL 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

SLL 8976. Master's Thesis Defense (0). (P/F grade only.)

Spanish

Advanced Undergraduate Courses

Note: *Graduate students must obtain permission from the Spanish coordinator and the associate chair for graduate studies in order to take these courses for credit.

SPN 4420.* Advanced Spanish Composition and Translation (3). Prerequisites: SPN 3300 and SPN 3400. This course stresses composition in Spanish with less emphasis on translation from Spanish into English. For students with prior knowledge of essential points of Spanish grammar.

SPN 4780.* Spanish Phonetics (3). Prerequisites: SPN 3300 and SPN 3400, or SPN 3350. This course involves training in the production of acceptable speech sounds in Spanish and a knowledge of when to use those sounds (allophonic distribution). The class meets both in the classroom and in the language laboratory. The nonnative speaker can profit most from this course.

SPN 4930r.* Studies in Hispanic Language and Literature (3). Prerequisites: SPN 3300 and SPN 3400 or instructor permission. May be repeated when content varies to a maximum of six semester hours.

SPN 4935r. Honors Work (3). May be repeated to a maximum of nine semester hours, three hours of which may be applied to the requirements for the major with permission of the department. All honors work is directed by the student's honors committee.

SPW 4190r.* Special Topics in Hispanic Languages and Literature (3). Prerequisite: One 3000-level course. This course consists of variable topics chosen from Spanish language movements, periods, figures, and problems. May be repeated to a maximum of six semester hours.

Graduate Courses

Spanish Language

SPN 5060r. Graduate Reading Knowledge in Spanish (3). (S/U grade only). This course is designed to present structures of the Spanish language and vocabulary to prepare graduate students majoring in other disciplines to read journals, books, and monographs written in Spanish useful to the student's research. May be repeated to a maximum of nine hours.

SPN 5069r. Reading Knowledge Examination (0). (S/U grade only). This course is a translation examination to ascertain the student's ability to read research materials written in Spanish. Use of translation software is prohibited.

SPN 5776. Acquisition of Spanish Phonology (3). Prerequisite: SPN 5785 or SPN 5795. This course is an introduction to the fundamental theories, techniques and methodologies concerning the acquisition of second language phonetics and phonology and their application to Spanish.

SPN 5785. Acoustics Phonetics of Spanish (3). Miscellaneous requirement: This course assumes familiarity with the process of articulation, sound classification, and the sound inventory of speech. This course provides a thorough background in acoustic phonetics and its application for the description and analysis of Spanish sounds. The course offers an overview of the acoustic characteristics of Spanish sounds and suprasegmentals, and how they compare to English. The course also focuses on the practice and improvement of essential research skills, in particular writing effective abstracts, presenting and reviewing research articles, and designing original acoustic experiments.

SPN 5795. Phonology of Spanish (3). Prerequisite: A working knowledge of spoken Spanish. This course introduces the student to articulatory phonetics and the theory of Spanish phonology as a set of phonological rules determining allophonic distribution. Entails partial analysis of various dialects of Spanish during class and an assignment to make an analysis of the Spanish of some native speakers' dialect.

SPN 5805. Spanish Morphology and Syntax (3). Prerequisite: A working knowledge of Spanish. This course deals with syntactical and morphological rules based on early transformational grammar. Rules are tested in class discussion, and attempts are made to analyze prose and poetry according to the rules. Students make a syntactical analysis of one or more literary works, or parts of works, of their choice.

SPN 5845. History of the Spanish Language (3). This course is a study of the various phonetic, lexical, and syntactic changes that led to the development of modern Spanish from Classical Latin through vulgar Latin, old Spanish, and Renaissance Spanish, including the changes undergone by American Spanish.

SPN 5900r. Studies in Hispanic Language and Literature (3). May be repeated to a maximum of nine semester hours.

SPN 5940r. Teaching Practicum (0–5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

SPN 6925r. Tutorial in Professional Issues (0–2). (S/U grade only). Prerequisite: SPN 5940 or instructor permission. This course is an advanced professional preparation course to acquaint students with issues in their academic discipline. A maximum of three semester hours may count toward the degree. May be repeated to a maximum of nine semester hours.

Spanish Literature (Writings)

SPW 5195r. Studies in Hispanic Literatures and Cultures (3). This course focuses on specific literary and cultural topics in the field of Hispanic Studies from any region or period of the Spanish-speaking world. May be repeated to a maximum of nine semester hours.

SPW 5216. Spanish Golden Age Prose (3). This course includes reading and discussion of the great prose works from *La Celestina* to *El Criticón*. All Golden Age prose on the Spanish division graduate reading lists, with the exception of Cervantes' works, are covered.

SPW 5275r. Spanish 20th-Century Novel (3). This course focuses on the Spanish novel from the Generation of 1898 through the Post Civil War period. May be repeated to a maximum of six semester hours.

SPW 5315. Spanish Golden Age Theatre (3). This course consists of reading and discussion of representative comedias from Spain's Golden Age.

SPW 5337. Spanish Poetry to 1700 (3). This course is an intensive survey of Spain's lyric poetry from the *jarchas* through Góngora and Quevedo.

SPW 5338r. Spanish Poetry from 1700 to the Present (3). This course emphasizes close readings of poetic texts and major literary and artistic trends from Romanticism through the contemporary era. May be repeated to a maximum of six semester hours.

SPW 5356. Spanish American Poetry (3). This course is a study of the major tendencies and representative poets from the sixteenth century to the Modernist period.

SPW 5357. Contemporary Spanish American Poetry (3). This course is a comprehensive study of the major trends, figures, and schools of Spanish American poetry since Modernismo.

SPW 5365. Spanish American Prose: Nonfiction (3). This course studies the major tendencies and representative nonfictional prose writers up to the Contemporary period.

SPW 5385. Early and Modern Spanish American Prose Fiction (to 1927) (3). This course studies the major tendencies and representatives of prose fiction up to the Modernistas and Mundonovista novel and short story.

SPW 5386. Contemporary Spanish American Prose Fiction (since 1927) (3). This course is a comprehensive overview of Spanish American prose since the advent of Jorge Luis Borges' short stories and the genres of the novel and short story, covering trends from the avant-garde to neo-realism, neo-naturalism, cosmopolitanism, and sociopolitical content.

SPW 5405. Medieval and Early Renaissance Spanish Literature (3). This course is an examination of the major genres of the period together with readings of some secondary works. Topics for the course include epics and ballads, Clerencia literature, courtly lyric, Alfonsine works, and early drama.

SPW 5486. Contemporary Spanish Women Writers (3). This course is designed to introduce the student to the works of 20th-century Spanish women writers and the critical attention they have received.

SPW 5496. Spanish-American Women Writers (3). This course is a study of Spanish-American women writers, focusing on prose fiction, non-fiction and/or drama. Supplementary readings are taken from critical and theoretical works.

SPW 5586. Critical Inquiries into the Early Hispanic Episteme (3). This course begins with the premise that it is possible to trace certain important epistemological shifts in the Western world from the end of the Middle Ages to our own time. The course aims to heighten our awareness of how today the practice of professional cultural studies is systematically interpellated through the discourses specific to our own systems of knowledge and communication. Taking medieval and early modern Iberia, as well as its colonies, as a case study, examinations of a selection of texts from this geographic and temporal space revolve around the usefulness, or lack thereof, of some of the contemporary West's most prominent social constructions of subject formation, such as race, class, gender, and nationhood.

SPW 5606. Cervantes (3). This course is an individual survey of Cervantes' literary works, especially *Don Quixote*.

SPW 5908r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

SPW 5910r. Supervised Research in Spanish (1–5). (S/U grade only). For this course, a maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

SPW 5971r. Thesis (1–6). (S/U grade only). For this course, a minimum of six semester hours is required.

SPW 6806. Research, Criticism and Professional Issues (3). (S/U grade only). This course is designed to prepare graduate students for professional research in the field of literary studies. The course includes a survey of references and research tools, readings and discussion on appropriate research techniques, critical theory, and familiarity with current professional issues for students and scholars in Hispanic studies.

SPW 6934r. Topics in Hispanic Language and Literature (3). This course is designed to cover topics not otherwise available in the curriculum. Topics vary and a particular topic is announced at least one semester in advance. May be repeated to a maximum of nine semester hours.

SPW 6980r. Dissertation (1–12). (S/U grade only). For this course, a minimum of twenty-four semester hours is required for the PhD.

SPW 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

SPW 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

SPW 8976. Master's Thesis Defense (0). (P/F grade only.)

SPW 8985r. Dissertation Defense (0). (P/F grade only.)

MOLECULAR BIOLOGY: see Biological Science

Graduate Program in MOLECULAR BIOPHYSICS

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.biophysics.fsu.edu/>

Program Director: Hong Li

Molecular biophysics involves the application of the principles and techniques of biology, chemistry, physics, and mathematics to the study of biomolecular systems. Studies are aimed at advancing our understanding of fundamental biological structures and processes, information needed for the understanding of disease, and for the design of novel therapeutic strategies. In general, these studies require a multidisciplinary approach that may include techniques derived from molecular biology, biochemistry, and biophysics. Biophysical techniques such as X-ray crystallography, electron microscopy, nuclear magnetic resonance (NMR), and other spectroscopic methods are common components of this work.

The development and application of physical techniques to study biological systems requires training in disciplines that have been traditionally divided into separate departments. To foster the development of a fully integrated research training program, the Institute of Molecular Biophysics was constructed in 1962 with funds from the Atomic Energy Commission, the National Institutes of Health, and the State of Florida. In this institute, students, post-doctoral fellows, and faculty associated with different departments share expertise and lab space. It is within this unique environment that the Molecular Biophysics Graduate Program is centered.

The program offers an interdisciplinary core of courses leading to the Doctor of Philosophy (PhD) degree in Molecular Biophysics or Computational Structural Biology. To this end, students are required to participate in a curriculum that will provide them with a strong background in both the physical and biological sciences. The program is designed to produce researchers and scholars with a broad understanding of the fundamental processes of biomolecular systems and a deep understanding of one or more experimental or theoretical approaches for the study of such systems. Research facilities available for the development of the graduate thesis include those located in the Institute of Molecular Biophysics; the departments of Biological Science, Chemistry and Biochemistry, and Physics; and the National High Magnetic Field Laboratory. No master's degree is offered.

Admission

Application for admission to the Molecular Biophysics graduate program is made through the University Office of Admissions using an online application and routed to the Program Coordinator. The admissions committee will consider all applicants with a strong background in any areas of physical, biological science, chemistry, mathematics, or engineering studies with a demonstrated aptitude for quantitative analysis and problem solving. All applicants must meet the minimum criteria of a 3.0 undergraduate grade point average (GPA) in all upper-division undergraduate coursework and provide three current letters of recommendation from individuals who are able to assess the applicant's academic and research potential. Successful applicants typically score above 153 on the Verbal portion and above 154 on Quantitative portion of the GRE (Graduate Record Examination) or have a combined score of at least 307 total Verbal and Quantitative combined. We do not have a minimum GRE score for admission, but applicants with lower GRE scores need to have strong research backgrounds, a GPA greater than 3.2 on upper division courses, and excellent letters of recommendation. The GRE Subject test is not required. Official transcripts are also required. International students must score a minimum of 600 on the Test of English as a Foreign Language (TOEFL) or 90 on the iBT version of the language exam. Applicants are asked to advise the admissions committee of their areas of interest so that applications can be circulated to the appropriate faculty members. Prospective students are encouraged to contact the Program Coordinator at mob@sb.fsu.edu.

Financial Aid

Acceptance into the program is accompanied by financial aid in the form of graduate assistantships, health insurance subsidy, and tuition waivers. Additional support of up to \$2,000 per student is available during the first two years to enable students to attend national meetings and workshops. Travel money is also available for advanced students presenting research at such meetings. In addition, the Donald Caspar Award and the Randolph Rill Award for Academic Achievement are available to selected outstanding applicants, providing a bonus up to \$2,000 that may be paid over the first two years. Eligibility for financial aid is reviewed every year and is based on satisfactory progress.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Doctoral Degree Requirements

The direction and supervision of graduate work at the doctoral level resides primarily with the major professor (thesis advisor) and the supervisory committee. The University requires that the degree be completed within five calendar years from the time the student gains admittance to candidacy by passing the preliminary exam and thesis prospectus defense.

Overall requirements for the Doctor of Philosophy (PhD) degree are as follows:

1. Completion of the course requirements outlined below;
2. After admission to doctoral candidacy, a minimum of twenty-four semester hours of dissertation credit is required;
3. Teach at least one semester;
4. Enroll in and attend the following seminar each Fall and Spring of the graduate career and present at least one seminar each year in the program:
 - BCH 6896r (letter grade) or BCH 6897r (S/U grade)
 - Attendance at other seminars and colloquia (such as CHM 6590r Physical Chemistry Seminar, PSB 6920r Neuroscience Colloquium, or BSC 6921r Colloquium in Biological Science) are at the discretion of the student and the major professor, but the student must enroll in BCH 6896r or BCH 6897r in Fall and Spring semesters.
5. Successfully complete the oral and written components of the preliminary doctoral examination;
6. Submit a doctoral research proposal approved by the major professor and the supervisory committee;
7. Submit, publicly present, and successfully defend an original dissertation.

Course Requirements

Students with very different backgrounds in biological or physical sciences may be admitted to the program. Thus, some may be required to take additional courses to provide an adequate background for graduate training in molecular biophysics, including a minimum of one semester of biochemistry and physical chemistry at the undergraduate level. This requirement may be met by taking the appropriate courses at Florida State University or equivalent courses from other institutions. Descriptions for all courses may be found under the appropriate departmental listings.

To help the student select a major professor and a dissertation topic, first year students are required to complete three lab rotations with faculty approved by the Graduate Program Committee. Each rotation will be for a minimum duration of six weeks. Credit for the rotations is obtained by registering for the following course during the first year:

MOB 5905r Directed Individual Study (1–12) [rotation]

All students are expected to complete a series of common graduate core courses, which consists of each of the following courses:

BCH 5505 Structure and Function of Enzymes (3)

BCH 5745 Chemical and Physical Characterization of Biopolymers (3)

PCB 5137 Advanced Cell Biology (3)

Approved Responsible Conduct of Research (1–2). This course should meet the NSF/NIH standards for responsible conduct of research training.

An additional nine semester hours are required, selected from courses offered by the Departments of Chemistry and Biochemistry, Biological Sciences, Physics, Mathematics, Neuroscience, and others. These courses must contribute directly to progress toward the degree program.

Definition of Prefixes

COM—Communication

ENC—English Composition

MOB—Molecular Biophysics

Graduate Courses

COM 5115. Scientific Presentations and Posters (3). (S/U grade only). This course emphasizes the importance of learning how to give top-notch talks and posters as a young science professional because a scientist's professional reputation rests not only on their scientific contributions, but also on how well they communicate their findings. This course covers such topics as effective slide design; how to overcome nervousness; how effectively use presentation aids, including microphones, pointers, notes, props, and handouts; how to handle audience questions; how to cope with problems; how to publicize a talk; ethical issues in giving talks; and how to design and use a poster to interact with colleagues at a conference.

ENC 5457. Writing in the Sciences (3). (S/U grade only). This course enables students to work on a writing project throughout the semester (e.g., journal article, fellowship proposal, or prospectus). Students identify the audience and purpose of their writing project and then clarify the central idea of their article or proposal. From there, they draft their work section by section, figure by figure, and then peer review their sections and figures in small groups. Central to the course is the idea that writing and thinking go hand in hand and that it is only through careful revision (at least for most), including careful consideration of peer feedback, that we are able to produce a finished paper or proposal that is clear and cogent enough to be published or funded.

MOB 5905r. Directed Individual Study (1-12). (S/U grade only). This course provides students with an opportunity to gain practical experience using different laboratory techniques and various instruments and equipment in research projects assigned by and under the close supervision of professors affiliated with the MOB graduate program. One-on-one discussions assures understanding of necessary basic scientific research approaches. May be repeated to a maximum of one hundred and fifty semester hours.

MOB 5906r. Directed Individual Study (1-12). Replaces MOB 5905 with a letter grade, with permission from the program director. May be repeated to a maximum of twelve semester hours.

MOB 5915r. Supervised Research (1-5). (S/U grade only). May be repeated to a maximum of five semester hours.

MOB 5935r. Special Topics (3). May be repeated to a maximum of fifteen semester hours.

MOB 6935r. Advanced Specialized Molecular Biophysics (3). May be repeated to a maximum of twenty-four semester hours.

MOB 6980r. Dissertation (1-12). (S/U grade only). A minimum of twenty-four semester hours of credit must be earned.

MOB 8964r. Preliminary Doctoral Examination (0). (P/F grade only.) A comprehensive examination. Passing exam required for admission to doctoral candidacy.

MOB 8965r. Thesis Prospectus Defense (0). (P/F grade only.) Prerequisite: MOB 8964. A formal grant proposal, or prospectus, in the NIH or NSF format describing preliminary results and proposed experiments is submitted to the doctoral supervisory committee followed by a formal oral presentation and an oral defense of the prospectus.

MOB 8985r. Dissertation Defense (0). (P/F grade only.)

Graduate MOTION PICTURE ARTS

COLLEGE OF MOTION PICTURE ARTS

Website: <http://film.fsu.edu/>

Dean: Reb Braddock; **Associate Dean:** Dr. Andrew Syder; **Assistant Dean:** Tony Ciarlariello; **Associate Professors:** Baggott; **Filmmakers in Residence:** Allen, Cawood, Cohen, Gómez-Mouakad, Hoffman, Honn, Kaleko, Marcks, Maurer, Mendez, Meyer, Mikota, Nunez, Nutting, Patterson, Riker, Robkin, Scoon, Slade, E. Stone, J. Stone, Tripp, Vargo, Williams

The Master of Fine Arts (MFA) is a graduate program in narrative motion picture production that prepares students for careers in producing, directing, screenwriting, production design, cinematography, sound design, and editing. Emphases in screenwriting and production are offered, with curricula designed to furnish the conceptual framework, the professional training, and the working environment for eventual participation in a profession that is a powerful influence in our culture. The goals of the College of Motion Picture Arts are to fully educate students, help them become integrated members of the academic community of Florida State University, become responsible members of the entertainment profession, and participate in a creative and artistic process.

Faculty Distinctions

The College of Motion Picture Arts has a strong commitment to hiring experienced, working professionals who have both teaching skills and professional goals. The College's full-time faculty comprises working filmmakers with various specializations as writers, directors, producers, cinematographers, audio designers, production designers, and editors in both the theatrical and non-theatrical film and television industries, many of whom have won national and international awards and honors for their work. Some of the faculty also have strong records as research scholars and fiction writers, including visiting professors in the fields of motion picture law, business distribution, exhibition, and promotion.

Facilities

The College of Motion Picture Arts operates extensive production facilities for its graduate and undergraduate programs in *University Center A* on Florida State University's campus in Tallahassee, and in an off-campus site in Midway, Florida, known as the Torchlight Center.

Considered one of the finest facilities in the world devoted exclusively to film education, it includes: professional sound stages, a green-screen/motion capture stage, a cinematography and set operations teaching stage, grip and electric trucks fully equipped with industry standard G&E equipment, an ADR and Foley recording studio, re-recording stages, QC and dailies screening rooms, digital animation/VFX production labs, color correction suites, a 120-seat screening room, digital animation/VFX production suites, seminar rooms, writer rooms, interactive classrooms, individual post production suites, teaching labs, and student production planning rooms.

The College is equipped for and supports industry-standard acquisition in HD, 2k, 4k, 8k digital formats, and digital sound recording formats.

MFA Program

The goals of this professional degree are:

1. To ground students in the history, theory, and practice of narrative motion picture production
2. To provide the creative and technical environment for professional specialization to take place
3. To help graduates begin careers in screenwriting, producing, directing, camera, sound, editing, and production design
4. To provide interaction with a wide range of film and television industry professionals in order to provide information on the most recent trends and processes in the film/television business

To these ends the college's approach emphasizes three kinds of learning experiences: 1) coursework in history, theory, style, technology, and techniques; 2) seminars in specific skill areas conducted by active professionals; and 3) independent production projects. Production students work in teams on narrative projects. These projects are written, produced, directed, shot, recorded, and edited by Motion Picture Arts students. In addition, the students engage in the financial, legal, distribution, and exhibition aspects of the film/television business.

The program is designed and scheduled to provide training of the highest quality. It is meant to create a practicum setting in which individuals can work with accomplished professionals to hone their talents, develop a body of work, and sharpen their capacities to work in teams.

After required coursework, students are encouraged to complete their program of study by enrolling in the program's apprenticeship class to apply their learning in a real-world setting in the industry. This capstone experience will position students for greater chances of success in their careers.

Financing and Ownership of Student Films

The College of Motion Picture Arts pays for all student laboratory, workshop, and thesis project production expenses, on both graduate and undergraduate levels. So far as is known, it is the only film school in the United States to do so.

The College has an agreement with the Screen Actors Guild (SAG) of America whereby SAG performers may work on graduate student projects on a deferred-salary basis. Should such films be distributed commercially, SAG actors involved will be the first to be paid their appropriate salaries from the gross revenues.

Under State of Florida law, regulations, and rules, all films and videos produced by Motion Picture Arts students become the property of Florida State University and are copyrighted in the name of Florida State University. The same regulations and rules provide that in the event of the commercial exploitation of these films, any net revenues derived from a particular film will be split in a proportion to be determined by Florida State University (currently 50/50) between the College of Motion Picture Arts and all of the graduating student workers on the film including, but not limited to, the writer, director, producer/production manager, sound designer, editor, cinematographer, art director, and musical score composer.

State law provides that any stand-alone screenplays created by students will remain the student's property and may be exploited commercially by them; however, screenplays, scripts, and story ideas that are proposed and incorporated by students into their workshop courses or thesis films become the property of Florida State University and will be copyrighted in the University's name.

State law requires that all entering students be provided with a copy of the relevant regulatory rule and that applicants for admission to Motion Picture Arts sign a statement acknowledging their receipt and understanding of the rule prior to official admission and enrollment.

Admission

Admission to the College of Motion Picture Arts graduate program is limited access with twenty-four production and six to eight writing students admitted each year, making admission selective and competitive. Prospective students must submit an application to and meet the requirements of the Florida State University Graduate Admissions Office, and also must submit supporting application materials as described online at: <http://film.fsu.edu/admissions>. Required supporting materials for production applicants include: a 500–1000-word statement of purpose describing their artistic work, creative influences, relevant background, and career goals; three letters of recommendation; a professional/creative résumé; a writing sample adhering to the given prompt; a creative portfolio; a video pitch; and transcripts. Screenwriting applicants must submit three samples of their written work as specified supporting materials, as well as a résumé and statement of purpose. Detailed information is available online at <http://film.fsu.edu/admissions>.

Enrollment Requirement

Because of the integrated and intensive nature of the program, all students will be required to enroll as full-time students; while enrolled in the program, students are not permitted to hold outside employment. Students who must withdraw for any reason will be reevaluated by a faculty committee for future readmission. Students may enter the program only in the Fall semester.

MFA Requirements

The MFA degree requires completion of a minimum of 90 semester hours for production students, or 61 semester hours for screenwriting students and must be completed in six consecutive full-time semesters.

To fulfill the requirements of the MFA Program in the College of Motion Picture Arts, a student must:

1. Possess sufficient mobility, strength, and dexterity in both hands and legs to lift, carry, and operate filmmaking equipment
2. Possess sufficient visual capacity to perform the functions of a film crew member without the assistance of visual aids other than contact lenses or eyeglasses
3. Possess sufficient aural capacity to hear and understand spoken instructions without assistance other than a hearing aid

4. Be able to comprehend oral and written instructions, policies, and procedures related to the College of Motion Picture Arts, filmmaking protocols, and the operation of equipment
5. Possess the ability to adequately communicate orally, in English, with others

Probation and Dismissal

Motion Picture Arts majors will adhere to the University Academic Honor System, Student Conduct Code, Summons to Responsible Freedom, and the College of Motion Picture Arts Professional Code of Conduct.

Each semester, the faculty will meet to discuss the work, behavior, grades, and progress of students in the major. At any point in the semester, if the faculty determines that a student's behavior fails to adhere to the College's Professional Code of Conduct, the student may be issued a verbal warning or a written remediation plan. Failing to satisfy the terms of a remediation plan may result in dismissal from the program.

Behavior so negative, disruptive, or destructive as to compromise the work of fellow students or the effectiveness of the faculty may constitute grounds for immediate dismissal without any prior period of warning or remediation. Peer evaluations may be considered in this evaluation process.

Any unauthorized use, possession, or willful destruction of College of Motion Picture Arts equipment, facilities, media, or finished film will result in immediate notification to the proper authorities. The outcome of their decisions will determine the actions of the College of Motion Picture Arts with respect to the student(s) involved.

If the cumulative GPA falls below 3.0, it will result in academic probation. Students will be reinstated in good standing if the cumulative major GPA rises to 3.0 by the end of the following semester. Failure to raise the GPA may result in dismissal from the program.

Financial Aid

A limited number of graduate assistantships are awarded by the College of Motion Picture Arts each year. Highly qualified students are nominated by the College for university-wide fellowships and minority fellowships. For more information regarding the availability of other sources of financial aid and potential scholarships, please visit the Financial Aid Web site at <http://www.financialaid.fsu.edu/>.

Health Insurance

Students seeking degrees in certain majors, including film, assume any exposure to the particular hazards associated with that major. As protection for our students, the College of Motion Picture Arts requires that majors present proof of health and accident insurance (name of insurer and policy number) prior to registration in the Fall semester each year. Students are expected to maintain this insurance throughout their enrollment in the program and keep the insurance information updated with the Associate Dean's office.

Definition of Prefix

FIL—Film

Graduate Courses

FIL 5147. Writing the Dramatic Series Pilot (1–6). Prerequisite: MFA Admission. This course instructs students on how to create and write a professional-quality pilot script for an original dramatic series. Special focus is given to world-building, idea sustainability, creating unique, dimensional, and believable characters, and cultivating compelling drama. May be repeated to a maximum of twelve semester hours.

FIL 5148r. Writing the Dramatic Series Spec (1–6). Prerequisite: MFA admission. This course introduces students on how to create and write a professional-quality spec script for an episodic series. Special focus is given to series formats, characters, and conventions. Students apply course concepts by developing and writing original spec scripts for existing series. May be repeated to a maximum of twelve semester hours.

FIL 5155Lr. Screenwriting: Short Format (1–12). Prerequisite: MFA admission. This workshop-style course examines basic narrative elements in the context of writing a short form script. Through developing, writing, developing, and then rewriting a script, students learn script language and process. May be repeated to a maximum of twelve semester hours in the same term.

FIL 5156Lr. Screenwriting: Feature Format (1–12). Prerequisite: MFA Admission. This workshop-style course examines how to create dimensional characters and a well-structured story in the context of writing a feature film script. Students pitch, outline, and write a screenplay with a strong focus on believable characters and situations that draw the reader/audience into the world they have created and bring the story to a satisfying conclusion. May be repeated to a maximum of twelve semester hours in the same term.

FIL 5157L. Screenwriting 3: Advanced Workshop (2-6). Prerequisite: FIL 5156L. Offers an advanced approach to writing a fifteen page script. Will analyze narrative problems in preparation for a rewrite. Through workshops, redeveloping, and then re-writing a fifteen page thesis script, the student will gain a better understanding as to how to make a story idea more compelling through rewriting.

FIL 5159r. Screenwriting: Motion Picture Workshop (1-6). Prerequisite: MFA admission. This course focuses on writing screenplays that apply dramatic storytelling concepts. Through regular writing workshops, students examine and practice story development techniques as well as industry-standard practices involved in creating motion picture scripts. May be repeated to a maximum of twelve semester hours.

FIL 5408r. Preproduction and Production Planning (3-12). Preproduction of MFA thesis projects. Provides student with advanced instruction related to their chosen field of specialization while requiring them to coordinate their efforts with those of their crew counterparts, up to the beginning of the thesis project production phase. Credit hours determined by work load assigned, according to student's area of emphasis. May be repeated to a maximum of twelve semester hours. May be repeated during the same semester.

FIL 5459. Practicum in Technical Support (1-12). Miscellaneous requirement: MFA Admission. This course is comprehensive practical training for first-year students in below-the-line production and post-production skills, including the work of the camera assistant, grip, gaffer, sound mixer, boom operator, sound engineer, assistant editor, and various others. Training is concurrent with students' crew work on multiple film productions. May be repeated to a maximum of twelve semester hours.

FIL 5484Lr. Directing Actors (2). Basic introduction to the direction of actors and scene work in film. Students will learn techniques for creating dramatic choices that serve the needs of both actors and writers while maintaining a strong directorial vision and will gain insight into the directing process as it relates to four specific concepts: conflict, actions, point-of-view and objectives.

FIL 5496r. Motion Picture Acting (1-6). Prerequisite: MFA admission. This is a performance-based course designed to teach the basic tenants of acting. Students are introduced to the language of acting, do a variety of acting exercises, and participate in a performance project crafted with the actor's process in mind. Through this process, students learn skills that can be used to enhance on-camera performances and directing actors.

FIL 5498L. Advanced Directing (2). Prerequisite: FIL 5595. Through lectures, discussions, and practical exercises students will analyze various visual techniques employed by directors in motion picture production.

FIL 5519Lr. Camera and Light Mechanics (1-6). Prerequisite: MFA admission. This course provides theoretical and practical instruction in cinematography including cameras, lenses, framing, composition, and lighting. May be repeated to a maximum of six semester hours. May be repeated within the same term.

FIL 5546. Advanced Sound (2-6). Prerequisite: FIL 5593L. Advanced knowledge of production and post-production sound recording through the recording, sound editing and re-recording of Directing 3 film projects.

FIL 5555Lr. Motion Picture Editing (1-6). Prerequisite: MFA admission. This course provides instruction in principles, aesthetics, and theory of motion picture editing through a combination of lecture and practical exercises. Students apply course concepts in editing motion picture shorts. May be repeated within the same term. May be repeated to a maximum of six semester hours.

FIL 5568L. Advanced Editing (2-6). Prerequisite: FIL 5555L. Teaches advanced theories in film editing by experiencing the step-by-step evolution of motion picture editing involving dailies, rough-cut, fine-cut, critique, and addressing story, emotion, structure, transition, pace, rhythm, point-of-interest, stage-line and the smooth cut.

FIL 5590L. Lighting Workshop (2-6). Prerequisite: FIL 5519L. Explores the more complex aspects of cinematography beyond the basics; provides support, guidance and criticism for cinematography performed on Directing 3 film projects.

FIL 5591r. Production Design Workshop (1-12). This course provides instruction in production design principles and practices used in the Art Department for motion pictures, including the use of settings, set dressings, props, wardrobe, hairstyling, makeup, and special effects to inform character and story. May be repeated to a maximum of twelve semester hours. May be repeated within the same term.

FIL 5592L. Sound Workshop (1-6). Prerequisite: MFA admission. This course provides instruction in theoretical concepts and technical skills employed in sound recording and re-recording throughout the various stages of motion picture production and post-production. May be repeated to a maximum of six semester hours. May be repeated within the same term.

FIL 5593L. Post-production Sound Workshop (2). Prerequisites: FIL 5592L. This course will provide an understanding of digital sound recording, sound mixing, and the various stages of sound post-production.

FIL 5595Lr. Directing: Single-Camera Workshop (2). A study and practice in the visual illustration of essential dramatic elements as they relate to the direction of motion pictures. May be repeated to a maximum of six semester hours.

FIL 5635r. Motion Picture Marketing and Exhibition (1-6). Prerequisite: MFA admission. This course provides an introduction to the marketing and exhibition of motion pictures, with an emphasis on current methods and practical techniques for promoting, publicizing, and distributing short films. Throughout the course, students develop original marketing materials to be used primarily for film festival submissions. May be repeated to a maximum of twelve semester hours.

FIL 5636Lr. Advanced Workshop in Area of Specialization (2-12). Advanced, specialized production training in the student's primary area of production. May be repeated to a maximum of fifteen semester hours.

FIL 5642L. Producing 1 (2). Provides an overview of film production management, with emphasis on the breakdown, scheduling, budgeting and preparation of short films.

FIL 5646L. Producing 2 (2). Prerequisite: FIL 5642L. Training and practice in the development of business structure for the purpose of producing motion pictures.

FIL 5648Lr. Production Management (2). Prerequisite: MFA admission. Introductory course to the production management process as it relates to both short film and feature film production. Through lecture, text and simulated practical application, students will acquire a working understanding of film producing from development to exhibition. May be repeated to a maximum of six semester hours.

FIL 5715Lr. Pre-Visualization (1-6). Prerequisite: MFA admission. This course instructs students in pre-visualization techniques by using industry-standard, 3D tools to model simple structures and objects, animate basic character rigs for staging, and work with virtual cameras to block out shots and narrative sequences. Students apply course concepts in a variety of practical exercises. May be repeated to a maximum of twelve semester hours.

FIL 5795Lr. Visual Effects (1-6). Prerequisite: MFA admission. This course instructs students in how to make effective choices with practical and digital visual effects. By means of classroom lecture and lab exercises, students practice techniques for creating visual effects that are common within the motion picture industry. Students also practice using industry workflows for planning, communicating, and executing visual effects. May be repeated to a maximum of twelve semester hours.

FIL 5807. Critical Methods of Film Analysis (3). Film study course providing students with an advanced understanding of the construction of the motion picture narrative language, stressing the students need to develop fluency in visual storytelling through a conscious building of a film literacy.

FIL 5875r. Film Aesthetics (1). Teaches the potential filmmaker to have their own aesthetics of filmmaking and to articulate that style by viewing various films with unique styles and aesthetics. Class discussion is also used to achieve this goal. Allows students to become more aware and conscious filmmakers through their ability to articulate their aesthetic. May be repeated to a maximum of four semester hours.

FIL 5906r. Directed Individual Study (3-12). (S/U grade only). May be repeated to a maximum of twelve semester hours. May be repeated during the same semester.

FIL 5912r. Supervised Research or Creative Activity (3). (S/U grade only). May be repeated to a maximum of five semester hours.

FIL 5921r. Colloquium in Motion Picture Arts (1-6). Prerequisite: MFA admission. This course provides specialized study in narrative motion picture history, criticism, theory, genres, movements, and filmmakers. May be repeated to a maximum of six semester hours. May be repeated within the same term.

FIL 5930r. Proseminar in Motion Picture, Television, and Recording Arts (1). Interaction with professional film/video makers in screenings and discussions of each other's work. May be repeated to a maximum of six semester hours.

FIL 5931r. Special Topics in Motion Picture Arts (1-12). Prerequisite: MFA admission. This course provides focused instruction in a special topic within the field of motion picture arts. May be repeated to a maximum of twelve semester hours. May be repeated during the same semester.

FIL 5955r. Apprenticeship (1-12). (S/U grade only). Professional on-the-job training in an area of specialization. May be repeated to a maximum of twelve semester hours.

FIL 5962r. MFA Qualifying Project (3-15). Postproduction of MFA thesis projects. Provides students with advanced instruction related to their chosen field of specialization while requiring them to coordinate their efforts with those of their crew counterparts, up to thesis project completion. Credit hours determined by work load assigned, according to student's area of emphasis. May be repeated to a maximum of fifteen semester hours.

FIL 5964. MFA Qualifying Exam (0). (P/F grade only.) Corequisite: FIL 5962r. Evaluation of first-year progress including public screening of MFA qualifying project and oral examination.

FIL 5966r. Comprehensive Exam (0). (P/F grade only.)

FIL 5975r. Thesis (3-12). (S/U grade only). Opportunity to design, execute, and report a major creative effort. May be repeated to a maximum of twelve semester hours.

FIL 5976. Master's Thesis Defense (0). (P/F grade only.)

FIL 5977r. MFA Thesis Production (3-15). (S/U grade only). Production of MFA thesis projects. Provides students with advanced instruction related to their chosen field of specialization while requiring them to coordinate their efforts with those of their crew counterparts, up to the thesis project postproduction phase. Credit hours determined by work load assigned, according to student's area of emphasis. May be repeated one time to a maximum of fifteen semester hours. May be repeated during the same semester.

FIL 5978. Defense of MFA Project (0). (P/F grade only.)

Graduate MUSIC

COLLEGE OF MUSIC

Website: <https://www.music.fsu.edu/>

Professors: Amsler, Bakan, Brewer, Buchler, Callender, Clary, Clendinning, Darrow, Drew, Dunnigan, Fenton, Fisher, Flowers, Frederickson, Gaber, Gainsford, Geringer, Gregory, Hoekman, Holzman, Jimenez, E.A. Jones, Jordan, Keesecker, Kelly, Kraus, Lata, Madsen, Moore, Ohlsson, Parks, Peterson, Porter, Rogers, Ryan, Sauer, D. Seaton, Standley, Stebleton, Trujillo, VanWeelden, Von Glahn, Zwilich; **Associate Professors:** Anderson, Barnhart, Bish, Brister-Rachwal, Bugai, Everly, Gunderson, Hanawalt, Holden, Kalhous, Okerlund, Quinn, Roberts, Roman, Stillwell, Sung, Thrasher, Williams, Wingate; **Assistant Professors:** Benavidez, Chandler, De Cock, Deibel, Detweiler, Dumlavwalla, Gooding, E.T. Jones, K. Jones, Large, League, Lumsden, Rabinovitch, Speed, G. Springer, J. Springer, Stonikas, S. Thomas, Timpone, Ugay; **Visiting Professors:** Atkins, Broyles, Corzine; **Visiting Associate Professors:** Enlow, Gutierrez; **Visiting Assistant Professors:** Arsenault, Arthur, Banky, Byrnes, Dunning, Huse, Ivey, J. Sung; **Specialized Teaching Faculty:** Hobson, Lima, Lopez-Dabdoub, Plack, G. Seaton, Songsirdej, Yeoh; **Faculty Librarians:** Cohen, Green

The graduate program of the College of Music is one of the largest and most comprehensive in the country. Accredited by the National Association of Schools of Music since 1930, the college has a long and illustrious history of graduating outstanding performers, composers, scholars, educators, and therapists.

The following are the graduate degrees offered by the College of Music:

Master of Arts in Arts Administration

Master of Arts in Music (Emphases in Music/Liberal Arts, Piano Technology)

Master of Music in Composition

Master of Music in Music Theory

Master of Music in Music Therapy

Master of Music in Musicology (historical or ethnomusicology)

Master of Music in Opera Production (coaching or directing)

Master of Music in Performance

Accompanying

Conducting (band, choral, or orchestral)

Guitar

Harp

Jazz

Organ

Piano

Piano Pedagogy

Strings

Voice

Woodwinds, Brass, or Percussion

Master of Music Education

Doctor of Music in Composition

Doctor of Music in Performance

Collaborative Piano

Guitar

Harp

Organ

Piano

Strings

Voice

Woodwinds, Brass, or Percussion

Doctor of Philosophy in Music Education

Doctor of Philosophy in Music

Musicology (historical or ethnomusicology)

Music Theory

In addition to its degree programs, the College of Music offers a number of specialized studies programs that provide an additional area of emphasis for graduate students. These include programs in arts administration (doctoral students only), music leadership, sacred music, jazz studies, piano pedagogy, early music, music of the Americas, pedagogy of music theory, special music

education, and college teaching. Further information about admission to and requirements of these programs is available from the admissions office of the College of Music.

For complete details of degree requirements, plus a description of the college, its facilities, opportunities, and available financial assistance, refer to the "College of Music" chapter of this *Graduate Bulletin*.

Definition of Prefixes

MUC—Music: Composition

MUE—Music Education

MUG—Music: Conducting

MUH—Music: History/Musicology

MUL—Music Literature

MUM—Music: Commercial/Management/Administration

MUN—Music Ensembles

MUO—Music: Opera/Musical Theatre

MUR—Music: Church

MUS—Music

MUT—Music: Theory

MUY—Music: Therapy

MVB—Applied Music: Brasses

MVH—Historical Instruments

MVJ—Applied Music: Jazz

MVK—Applied Music: Keyboard

MVO—Applied Music: Other

MVP—Applied Music: Percussion

MVS—Applied Music: Strings

MVV—Applied Music: Voice

MVW—Applied Music: Woodwinds

Graduate Courses

Composition

MUC 5110r. Composition (2). This course is for non-composition majors only. May be repeated to a maximum of six semester hours.

MUC 5251r. Composition (3). Prerequisite: Instructor permission. This course is for composition majors only. May be repeated to a maximum of twelve semester hours.

MUC 5615r. Film Scoring (3). Prerequisite: Instructor permission. This course examines techniques of film scoring and review of application requirements. May be repeated to a maximum of six semester hours.

MUC 5625r. Jazz Composition (3). Prerequisite: Instructor permission. This course examines techniques of creative jazz composition and literature. May be repeated to a maximum of six semester hours.

MUC 6261r. Composition (3). Prerequisite: Instructor permission. This private studio course in music composition provides students with critiques and assistance on composition projects and exercises during weekly lessons. This course is for music composition majors only. May be repeated to a maximum of twelve semester hours.

MUC 6956. Composition Doctoral Recital (0). (S/U grade only).

Music Education

MUE 5045. Social and Historical Foundations of American Music Education (3). This course focuses on the social significance of music, vernacular, and serious art in the lives and development of Americans and its effect on public education.

MUE 5046. Sociology of Music Education (3). This course analyzes the effects of society, culture and musical behavior on the activities, attitudes and learning behaviors in public school education.

MUE 5096r. Arts in Medicine Service (1–3). This course orients, teaches, and coordinates students who wish to volunteer for Arts in Medicine practica at Tallahassee Memorial HealthCare. The purpose of the course is to allow each student to use his/her particular talents to benefit Tallahassee Memorial patients, families and staff. For each hour of academic credit, students are required to complete two hours per week of volunteer service throughout the semester. May be repeated a maximum of three semester hours.

MUE 5145. Significant Developments in Music Education Curricula (3). This course analyzes developments in music education with implications for designing music education curricula, K–12.

MUE 5185. College Music Administration (3). Prerequisite: Instructor permission.

MUE 5316. Organizing and Teaching Elementary Music (3). Prerequisites: MUE 2290, MUE 3210, MUE 3311, or teaching experience. This course surveys current materials and teaching techniques in elementary school music.

MUE 5369. Organizing and Teaching Music in General Education (3). Prerequisite: MUE 3334 or instructor permission. This course surveys current materials and techniques in music instruction for the general student in the middle school, junior high school, and high school.

MUE 5396. Music in Special Education (3). Prerequisite: General sociology (or anthropology), general psychology, or instructor permission. This course examines techniques of teaching music to children in special education programs.

MUE 5398. Survey of Vocal Diction for Choral Music Educators (2).

MUE 5426r. Advanced Techniques in Choral and Instrumental Music: Choral (3). Prerequisites: MUE 4411 and MUE 4342; or teaching experience. Choral. May be repeated to a maximum of twelve semester hours.

MUE 5427. Advanced Techniques in Choral and Instrumental Music: Instrumental (3). Prerequisites: MUE 4411 and MUE 4342; or teaching experience. Instrumental.

MUE 5486. Jazz Ensemble Techniques (1). This course studies the implementation and administration of the jazz ensemble in the public school music program.

MUE 5498–5499r. Music Education Laboratory (1 hour each). 5498. Choral; 5499. Instrumental. May be repeated within the same term to a maximum of two semester hours.

MUE 5938. Introduction to Graduate Studies in Music Education (3). This course studies current issues, bibliography, and introduction to research techniques in music education. Required of master's music education majors.

MUE 5942r. FSU Capital Children's Choir Internship (1). This course consists of an internship with the Capital Children's Chorus of Tallahassee, including providing instructional activity and concert preparation under faculty supervision.

MUE 5943. Internship in Music (6). (S/U grade only). Prerequisite: Instructor permission.

MUE 5945r. Practicum in Supervising and Directing Education and Research in Music (3). (S/U grade only). This course involves the development of practical experience, applied analysis, and increased competency in relation to education and research experience in music. May be repeated to a maximum of six semester hours.

MUE 6385r. College Teaching: Music in Higher Education (3).

MUE 6939r. Doctoral Seminar in Music Education (3). For doctoral music education majors only. May be repeated to a maximum of six semester hours.

MUE 6946r. Practicum in Supervising and Directing Education and Research in Music (3). (S/U grade only). This course studies the development of practical experience, applied analysis, and increased competency in relation to education and research experiences in music. May be repeated to a maximum of six semester hours.

Conducting

MUG 5205r. Advanced Conducting: Chorus (2). Prerequisites: Graduate standing and experience in conducting. This course studies choral literature through analysis and conducting. May be repeated to a maximum of sixteen semester hours.

MUG 5306. Advanced Conducting: Orchestra (2). Prerequisites: Graduate standing and experience in conducting. This course studies orchestral literature through analysis and conducting.

MUG 5307r. Advanced Conducting I: Band (2). Prerequisites: Graduate standing and experience in conducting. This course studies wind literature through analysis and conducting. May be repeated to a maximum of four semester hours.

MUG 5308. Advanced Conducting II: Band (2). Prerequisite: MUG 5307. This course examines advanced conducting study of gesture, rehearsal techniques, and musical interpretation appropriate to wind performance practice.

MUG 5957. Master's Recital: Choral Conducting (2). (S/U grade only). This course is required of choral conducting majors in lieu of thesis.

MUG 5976. Wind Ensemble/Band Master's Recital: Chamber (2). (S/U grade only). This chamber recital is required of wind ensemble/band conducting majors in lieu of thesis.

MUG 5977. Wind Ensemble/Band Master's Recital: Large Ensemble (2). (S/U grade only). This large ensemble recital is required of wind ensemble/band conducting majors in lieu of thesis.

MUG 5978. Master's Recital: Orchestral Conducting (2). This orchestral conducting recital is required of instrumental conducting majors (orchestral emphasis) in lieu of thesis.

Jazz Studies

MVJ 5976. Master's Recital: Recital Preparation (2). This course provides preparation of a master's level recital in jazz performance.

MVJ 5977. Master's Recital (2). This course focuses on performance of a master's level recital in jazz performance.

Music History

MUH 5219. Music History Graduate Survey (2). (S/U grade only). This course is a synoptic review of the history of music from Greek music to the present day and is required of all graduate music majors unless exempted by examination. Credit earned in MUH 5219 does not apply to credit-hour requirements of any degree in the College of Music.

MUH 5305. Seminar in Performance Practice I: Musical Performance During the Middle Ages and Renaissance (3). This course examines a number of basic issues that stem from music of the Middle Ages and Renaissance that are still relevant for an understanding of all later musical performance.

MUH 5306. Seminar in Performance Practice II: Music Performance During the Baroque, Classic, and Romantic Eras (3). This course examines a number of basic issues that stem from music of the Baroque, Classic, and Romantic eras that are still relevant for an understanding of all later musical performance.

MUH 5325, 5335, 5345, 5355, 5365, 5375. History of Music (three hours each). 5325: Medieval; 5335: Renaissance; 5345: Baroque; 5355: Classical; 5365: Nineteenth Century; 5375: Twentieth and Twenty-First Century.

MUH 5410. The Notation of Polyphonic Music to 1600—Black Notation (3).

MUH 5411. Notation of Polyphonic Music II (3). This course studies white mensural notation and the various types of tablature notation.

MUH 5536. African Soundscapes (3). This course introduces graduate students and upper-level undergraduates to the diversity of musical cultures from the African continent. Students explore various case studies from the continent and develop tools to interpret their musical value and contextual meaning. A background interest in music, anthropology, performance studies, or African studies is recommended.

MUH 5546. Music of Latin America (3). This course studies the musical cultures of Latin America, including Native American, European, African, and Asian derived, and syncretic or mestizo forms.

MUH 5548. Music in the Caribbean (3). This course surveys the musics of the Caribbean Basin: from Cuba to Trinidad-Tobago; the coastal regions of northern Venezuela and Colombia; and the eastern coasts of Central America and Mexico.

MUH 5555. Music of the Middle East (3). This course offers a study of selected music cultures of the Middle East, including areas in Central Asia and Northern Africa.

MUH 5576. Music of Indonesia (3). This course offers a survey of selected music cultures of Indonesia. The primary focus is on gamelan music, especially that of Java and Bali. Popular and experimental Indonesian musical forms, as well as Indonesian-inspired music by Western composers, are also investigated.

MUH 5577. Music of Japan (3). This course studies the traditional music of Japan, emphasizing historical background and cultural contexts, instruments and ensembles, structures and styles, theatrical and dance forms, and contemporary music.

MUH 5580. Introduction to Ethnomusicology (3). Prerequisite: MUH 2512. This course introduces students to the history, theory, and literature of ethnomusicology.

MUH 5581r. Seminar in Ethnomusicology (3). Prerequisite: MUH 5580. This course provides students with an in-depth study of a particular approach, theory, or methodology in ethnomusicology, as espoused by a particular person or school of thought. Students apply the techniques learned to a music culture of their choice. May be repeated to a maximum of six semester hours.

MUH 5587. Seminar in World Music Studies (3). This course is an advanced study of contrasting music cultures from around the world, emphasizing both music as sound, and music as culture.

MUH 5590. Seminar in Field and Laboratory Techniques in Ethnomusicology (3). This course provides basic training for field research and laboratory description and analysis in ethnomusicology.

MUH 5596. World Music Pedagogy (3). This course considers theory and practice of teaching undergraduate world music survey courses, including knowledge of, and critical approaches to, teaching materials in various media.

MUH 5635. Music in the United States I (3). This course surveys musical activities in the United States from the earliest settlements through the Civil War.

MUH 5636. Music in the United States II (3). This course surveys musical activities in the United States from the close of the Civil War to the present.

MUH 5655. Seminar in Performance Practice (3). This course offers an overview of the problems and current solutions related to the performance of music before the twentieth century. The approach is a combination of historical and theoretical study combined with practical performance projects.

MUH 5685. Introduction to Historical Musicology (3). This course introduces students to the history, scope, and sources of musicological research.

MUH 5686r. Seminar in Historical Musicology (3). Prerequisite: MUH 5685. This course provides graduate-level research experience in historical musicology. May be repeated to a maximum of six semester hours.

MUH 5805. Survey of Jazz History (2). This course offers a survey of the major periods and musicians in the history of jazz from the 1890's to the present.

MUH 5806. History of Jazz [1890–1950] (3). Prerequisite: MUH 3211 and MUH 3212. This course studies the evolution of jazz, including the study of: Ragtime, New Orleans, Chicago, pre-Swing, Swing, Be-Bop, and West Coast styles.

MUH 5807. History of Jazz (1950 to the present) (3). Prerequisite: MUH 3211 and MUH 3212. This course studies the evolution of jazz, including the study of Cool, Hard Bop, Free, Post Bop, and Pop-Jazz styles.

MUH 5945. Practicum in Collegium Directing (3). This course prepares students to perform every aspect of running an early music program, including choosing the program, instrumentation, learning to teach a variety of early instruments, diction for singers, sources for instruments, music, and supplies. In addition, it provides students with administrative skills that are vital to maintaining a viable program.

MUH 6687r. Advanced Seminar in Musicology I (3). This course offers doctoral-level study of research topics from all areas of musicological research. May be repeated to a maximum of nine semester hours.

MUH 6688r. Advanced Seminar in Musicology II (3). This course offers doctoral-level study of research topics from all areas of musicological research. May be repeated to a maximum of nine semester hours.

Music Literature

MUL 5412–5415. Solo Music Literature Seminar–Piano (2 hours each). Open to candidates for master's and doctoral degrees in performance or by instructor permission. 5412: Baroque to Classic; 5413: Classical; 5414: Romantic; 5415: Twentieth Century.

MUL 5425. Chamber Music Literature for Strings (3). This course studies chamber music literature for strings alone, strings with keyboards, and strings with other instruments.

MUL 5435. Guitar Literature I (2). This course studies guitar literature from the Renaissance to the Pre-Classical.

MUL 5436. Guitar Literature II (2). This course studies guitar literature from the Classical Period to the present.

MUL 5445, 5446. Solo Music Literature Seminar–Winds (3 hours each). Open to candidates for the master's and doctoral degrees in performance or by instructor permission. 5445: Woodwinds; 5446: Brasses.

MUL 5465. Percussion Literature and Resource Seminar (3).

MUL 5495. Survey of Organ Literature (1). This course surveys the major schools of organ composition, with particular emphasis on the contribution of organ music to the liturgy of the Western church.

MUL 5507r. Orchestra Wind Repertory (2). This course enables woodwind, brass, and percussion students to perform as well as to study works from the standard orchestral literature. May be repeated to a maximum of twenty-four semester hours.

MUL 5568. Chamber Music Literature for Piano and Winds (2). This course is a study of chamber music literature for wind instruments with keyboards.

MUL 5609. Survey of Sacred Vocal Literature (1). This course surveys the sacred vocal literature available for the liturgical year.

MUL 5620. Graduate Survey: German Vocal Solo Literature (1). This course reviews German vocal solo literature for students who do not have the prerequisite repertoire knowledge for MUL 5624.

MUL 5621. Graduate Survey: French Vocal Solo Literature (1). This course reviews French vocal solo literature for students who do not have the prerequisite repertoire knowledge for MUL 5625.

MUL 5624, 5625, 5626. Solo Music Literature Seminar–Voice (2 hours each). Prerequisites: MUL 3604 or equivalent for 5624; MUL 4605 or equivalent for 5625; MUL 4608 or equivalent for 5626. Open to candidates for the master's and doctoral degrees in performance, or by instructor permission. 5624: German; 5625: French; 5626: Contemporary.

MUL 5645r. Choral Literature (2). Prerequisite: Graduate standing in music. This course studies choral compositions from Palestrina to the present day, with special attention to the larger forms. May be repeated to a maximum of six semester hours.

MUL 5647. Survey of Sacred Choral Literature (1). This course surveys sacred choral literature suitable for medium size choirs in churches and synagogues embracing Catholic, Protestant, or Jewish faiths.

MUL 5672. 20th Century Opera Literature (2).

MUL 5677. Seminar in Opera Literature: 1600-1800 (2). This course offers a study of the primary stylistic traits of Western European opera as composed in the Baroque and Classical eras (circa 1600-1800) by major composers in the genre.

MUL 5678. Seminar in Opera Literature: 19th Century (2). This course offers a study of the primary stylistic traits of Western European opera as composed in the Romantic era (circa 1800-1900) by major composers in the genre.

MUL 5936r. Special Topics in Music Literature (1–3). This course studies a particular body of music literature. May be repeated to a maximum of twelve semester hours.

Commercial Music

MUM 5225. Theory of Piano Technology I (2). This course examines the history and fundamental principles of the modern mechanism of the piano and theory of piano tuning.

MUM 5226. Theory of Piano Technology II (2). Prerequisites: MUM 5225 and instructor permission. This course instructs students in the fundamentals of upright and grand piano regulation, minor repairs, and practical tuning skills.

MUM 5256. Piano Technology Practicum I (3). Prerequisites: Instructor permission and major status. This course covers the history and development of stringed keyboard instruments up to 1850, applied tuning and temperament theory in relation to modern and historical keyboards, as well as grand piano restoration techniques.

MUM 5257. Piano Technology Practicum II (3). Prerequisites: Instructor permission and major status. This course covers the practical application of tone-building and voicing techniques, action analysis using the equation balance, manufacturing techniques and engineering concepts in the fore-finishing process, as well as grand piano restoration.

MUM 5258. Piano Technology Practicum III (3). Prerequisites: Instructor permission and major status. This course covers concert-level tuning in the concert hall, wood science, effective business practices, inventory management, templates and fixtures, as well as grand piano restoration techniques.

MUM 5259. Piano Technology Practicum IV (3). Prerequisites: Instructor permission and major status. This course covers concert-level tuning in the concert hall, recording session techniques, effective artist-technician relations, historic keyboard conservation and stabilization principles, as well as grand piano restoration techniques.

MUM 5265. Organ Design and Maintenance (2). Open to all graduate organ majors and principals and others by consent of the instructor.

MUM 5805. Introduction to Arts Administration (3). This course covers the basics of arts administration, and is a core course in the degree program. The course deals with topics such as history and philosophy of arts administration, advocacy, arts in education, board, audience, and volunteer development, needs assessment, and program evaluation.

MUM 5807. Survey of Orchestra Management (3). This course serves as preparation for many of the executive-level challenges, issues and practices involved in managing a symphony orchestra in the United States today.

MUM 5808. Grant Writing for Music Professionals (3). This course is designed to provide students with the fundamental skills necessary for successful grant writing in music professions. Students are introduced to resources, tools, and techniques applicable to the grant writing process.

MUM 5815. Fundraising Strategies in the Arts (3). This course develops an overview of the philosophies, processes and practices of raising funds in the arts; teaches a working vocabulary and language relative to development and fundraising practices in the arts; and further develops students' research, writing and presentation skills.

MUM 5816. Audience Development, Marketing and Public Relations in Musical Arts Organizations (3). In this course, Arts Administration majors study the broad scope of developing audiences for such musical organizations as symphony orchestras, chamber orchestras, choruses and opera companies. Topics include current audience development, marketing and public relations strategies in place at a variety of musical arts organizations; analyzing these practices; and making recommendations for alternative or additional strategies.

MUM 5947r. Internship in Arts Administration (1–12). (S/U grade only). This internship takes place in an arts administration setting and includes a final written project. May be repeated to a maximum of twenty-four semester hours.

Music Ensembles

Note: All ensemble courses are repeatable.

MUN 5115r. Marching Chiefs (0–1). Prerequisite: By audition. This course provides band experience in marching and concert for all University students. May be repeated to a maximum of four semester hours.

MUN 5125r. Concert Band (0–1). This course provides concert experience in a variety of literature for all University students. May be repeated to a maximum of four semester hours.

MUN 5135r. Symphonic Band (0–1). Prerequisite: By audition. This course offers concert experience in a wide variety of literature. May be repeated to a maximum of four semester hours.

MUN 5145r. Wind Orchestra (0–1). Prerequisite: By audition. This course offers professional-level performance in a wide variety of literature. May be repeated to a maximum of four semester hours.

MUN 5146r. Chamber Winds (0–1). This course offers professional-level performance in a wide variety of wind-oriented chamber music. Open to selected graduate students. May be repeated to a maximum of four semester hours.

MUN 5215r. University Symphony (0–1). Prerequisite: By audition. This course consists of the study and performance of works representative of a broad spectrum of orchestral literature. Participation by string majors required. May be repeated to a maximum of four semester hours.

MUN 5315r. University Singers (0–1). Prerequisite: By audition. This course consists of the study and performance of works representative of a wide spectrum of choral literature. Open to all University students. May be repeated to a maximum of four semester hours.

MUN 5316r. Choral Union (0–1). This course consists of the reading, study, and performance of choral repertoire for mixed voices. Open to all University students. May be repeated to a maximum of sixteen semester hours. Student has option to repeat during the same semester.

MUN 5325r. Women's Glee Club (0–1). This course consists of the study and performance of representative choral works for women's voices. Open to all women enrolled in the University. May be repeated to a maximum of four semester hours.

MUN 5335r. Men's Glee Club [Collegians] (0–1). This course consists of the study and performance of representative choral works for men's voices. Open to all men enrolled in the University. May be repeated to a maximum of sixteen semester hours.

MUN 5345r. Chamber Chorus (0–1). Prerequisite: By audition. This course consists of the study and performance of accompanied and a cappella works suitable for a twenty-four to thirty voice mixed chorus. May be repeated to a maximum of sixteen semester hours.

MUN 5355r. Opera Chorus (0-1). Prerequisite: By audition. This course consists of the study and performance of works drawn from grand opera, operettas, and musicals. Productions presented in costume and makeup. May be repeated to a maximum of four semester hours.

MUN 5395r. University Chorale (0-1). This course consists of the study and performance of works representative of a wide spectrum of choral literature for mixed voices. Open to all University students except voice performance majors. May be repeated to a maximum of sixteen semester hours. Student has option to repeat during the same semester.

MUN 5425r. Woodwind Ensemble (0-1). Prerequisite: Instructor permission. This course consists of the study and performance of ensemble literature for woodwinds. May be repeated to a maximum of four semester hours.

MUN 5435r. Brass Ensemble (0-1). Prerequisite: Instructor permission. This course consists of the study and performance of ensemble literature for brasses. May be repeated to a maximum of four semester hours.

MUN 5445r. Percussion Ensemble (0-1). Prerequisite: Instructor permission. This course consists of the study and performance of ensemble literature for percussion. May be repeated to a maximum of four semester hours.

MUN 5456r. Duo Piano (1). Prerequisite: Instructor permission. This course consists of the study and performance of duo-piano and piano duet literature. May be repeated to a maximum of four semester hours.

MUN 5465r. Chamber Music (0-1). Prerequisite: Instructor permission. This course consists of the study and performance of vocal and/or instrumental ensemble literature. May be repeated to a maximum of four semester hours.

MUN 5477r. Collegium Musicum (0-1). Prerequisite: Instructor permission. This course consists of the study and performance of music of the Middle Ages and Renaissance periods, with emphasis on historical validity, technical proficiency, and expressive musicianship. May be repeated to a maximum of ten semester hours.

MUN 5478r. Baroque Ensemble (0-1). Prerequisite: Instructor permission. May be repeated to a maximum of ten semester hours.

MUN 5485r. Guitar Ensemble (0-1). Prerequisite: Instructor permission. This course consists of the study and performance of literature for guitar. May be repeated to a maximum of four semester hours. Student has option to repeat during the same semester.

MUN 5515r. Piano Vocal/Instrumental Accompanying (0-1). May be repeated to a maximum of four semester hours.

MUN 5715r. Jazz Ensemble (0-1). Prerequisite: By audition. This course consists of the study and performance of jazz band literature. May be repeated to a maximum of four semester hours.

MUN 5725r. Jazz-Pop Ensemble (0-1). Prerequisite: By audition. This course consists of the study and performance of jazz and popular vocal music. Ensemble may include choreography, performance with larger ensembles, and off-campus concerts. May be repeated to a maximum of four semester hours.

MUN 5806r. World Music Ensemble (0-1). Prerequisite: Instructor permission. May be repeated to a maximum of ten semester hours. Student has the option to repeat during the same semester.

Opera/Music Theatre

MUO 5007r. Musical Theatre Workshop (2). Prerequisite: Music theatre major or instructor permission. This course studies all phases of musical theatre production, with emphasis on and participation in staged musical theatre excerpts. May be repeated to a maximum of four semester hours.

MUO 5445r. Opera Coaching (1-2). Prerequisite: Instructor permission. May be repeated to a maximum of eight semester hours.

MUO 5455r. Performance of Operatic Role (1-2). Prerequisite: By audition. May be repeated to a maximum of ten semester hours.

MUO 5505r. Opera (0-4). Prerequisites: Audition and instructor permission. This course addresses the craft of the singer-actor. It is designed to cover the preparation and performance of main-stage roles, techniques of acting for the singer, repertoire, audition techniques, career development, music theater styles, and performance history. May be repeated to a maximum of twelve semester hours.

MUO 5605r. Opera Production (1). Prerequisites: Interview and instructor permission. This course is an in-depth study of opera production by way of its support areas: stage management, dramaturgy, production support of directors and designers. Emphasis and practical application with FSU Opera production running concurrently with the course. May be repeated to a maximum of four semester hours.

MUO 5701r. Opera Directing (2). Prerequisites: Interview and instructor permission. This course explores the function and techniques of stage direction; a theoretical approach to issues of style, conception, execution, and related topics (such as working with designers, conductors, producers.) Career development issues are addressed. Practical application occurs in tandem with the preparation of opera scenes in the various workshop components of the opera department. May be repeated to a maximum of six semester hours.

MUO 5801. Opera Project (3). This course examines the preparation and the direction of an approved chamber opera or opera scenes.

MUO 6446r. Opera Coaching (1-2). Prerequisite: Instructor permission. May be repeated to a maximum of eight semester hours.

Church Music

MUR 5206. Hymnology (2). This course is a practical and historical study of songs of the Church.

MUR 5415. The Organ and Its Music from the Middle Ages to the End of the 17th Century (2).

MUR 5416. The Organ and Its Music from the Time of J. S. Bach to the Present Day (2).

Music

MUS 5226. French Language and Diction for Singers (3). This course is the study of French diction and continuation of grammar studies from FRE 1120. The focus is on proper pronunciation of the French language and on grammar and vocabulary necessary for translating texts of French melodies and operas.

MUS 5236. German Language and Diction for Singers (3). This course is the study of German diction and continuation of grammar studies from GER 1120. The focus is on proper pronunciation of the German language and on grammar and vocabulary necessary for translating texts of German Lieder and operas.

MUS 5246. Italian Language and Diction for Singers (3). This course is the study of Italian diction and continuation of grammar studies from ITA 1120. The focus is on proper pronunciation of the Italian language and on grammar and vocabulary necessary for translating texts of Italian songs and operas.

MUS 5325. Survey of the Music Industry (3). This course provides an understanding of the world of commercial music and techniques in personal marketability.

MUS 5345. Music Instrument Digital Interface (3). Corequisite: MUS 5346. This course allows students to develop techniques in electronic music composition and all aspects of MIDI.

MUS 5346r. Laboratory for Music Instrument Digital Interface (2). Corequisite: MUS 5345. This course is the laboratory application of MUS 5345. May be repeated to a maximum of six semester hours.

MUS 5365. Graduate Survey of Music Technology (1). This course introduces students to music technology. Included are units in music notation, MIDI and sequencing, an overview of music software, and an overview of music multimedia hardware systems.

MUS 5536r. Multimedia for Musicians (3). Prerequisite: MUS 3500 or MUS 3540 or instructor permission. This course provides students with a basic knowledge of multimedia hardware and software systems, particularly as they relate to music. Students develop multimedia projects. May be repeated to a maximum of six semester hours.

MUS 5545. Electronics for Musicians (3). This course introduces basic concepts and practical experience in digital and analog electronics for musicians.

MUS 5546. Digital Music Synthesis I (3). Prerequisite: Instructor permission. This course provides students with basic theory and history of sound, knowledge of analog and digital sound recording and manipulation techniques, and an introduction to the art of electronic music.

MUS 5547. Digital Music Synthesis II (3). Prerequisite: MUS 5546. This course provides students with basic knowledge of both digital and analog sound distortion, synthesis and resynthesis techniques, and allows them to explore the technology and art of digital and music production.

MUS 5616. Psychology of Music (3). This course introduces a basic study of acoustics, the ear and hearing, musical systems, and the processes involved in musical behavior.

MUS 5619. Behavior Modification in Music (3). This course examines behavior modification techniques as applied to music education and music therapy.

MUS 5657. Nonverbal Communication in Human Interaction (3). This course contributes to the student's knowledge and skill in decoding and encoding nonverbal communication.

MUS 5711. Music Bibliography (2).

MUS 5721. Music Perception and Cognition (3). This course examines current theories and research in the perception and cognition of music, including studies of the ear and brain as they relate to the human processing of music.

MUS 5722. Descriptive Research in Music (3).

MUS 5723. Experimental Research in Music (3).

MUS 5724. Music Measurement (3). This course provides basic information about and techniques used in the measurement of music behavior. The course consists of demonstrations and discussion of the measurement of physical elements of music performance, expressive aspects, music preference, and emotional and physiological responses to music. Additional areas of discussion include the role, development and use of standardized testing and observation measures in music.

MUS 5735r. Advanced Methods in Music Research (3). Prerequisites: MUS 5721 and MUS 5723 or instructor permission. May be repeated to a maximum of six semester hours.

MUS 5806r. Dynamic Integration (0-1). This course heightens students' awareness of their minds and bodies in relation to performing on a musical instrument, addressing such topics as muscle balancing, concentration and performance anxiety. May be repeated to a maximum of one semester hour.

MUS 5906r. Directed Individual Study (1-3). (S/U grade only). Prerequisite: Instructor permission. May be repeated to a maximum of nine semester hours.

MUS 5910r. Supervised Research (1–3). (S/U grade only). Open to all graduate students with instructor permission. May be repeated to a maximum of three semester hours.

MUS 5931r. Arts Administration Seminar (1). This course is designed to provide arts administration students with a practical forum to interact with professionals and practitioners who work within and/or with the arts community. It also provides an opportunity for discussions with instructors on a variety of topics and issues that have a significant impact upon the development and effectiveness of arts organizations and arts professionals and for students to communicate with each other to establish the foundation of lasting professional affiliations. May be repeated to a maximum of two semester hours.

MUS 5937r. Graduate Tutorial in Music (1–3). (S/U grade only). Prerequisite: Graduate standing. This course consists of selected topics in music. May be repeated to a maximum of six semester hours.

MUS 5939r. Special Topics in Music (1–3). Prerequisite: Instructor permission. May be repeated to a maximum of nine semester hours.

MUS 5940r. Supervised Teaching (1–3). (S/U grade only). Open to all graduate students with consent of the Coordinator of Graduate Music. May be repeated to a maximum of six semester hours.

MUS 5941r. Internship in Music Performance (0–12). (S/U grade only). This course offers advanced performance activities in an internship setting. May be repeated to a maximum of twenty-four (24) credits.

MUS 5971r. Thesis (1–6). (S/U grade only). Prerequisite: Instructor permission. Six semester hours credit required.

MUS 5975. Graduate Project (2). (S/U grade only). Prerequisites: Graduate standing and instructor permission. This course consists of a major scholarly and/or performance project.

MUS 6907r. Directed Individual Study (1–3). (S/U grade only). Prerequisite: Instructor permission. May be repeated to a maximum of nine semester hours.

MUS 6979r. Doctoral Treatise (1–12). (S/U grade only). Prerequisite: Instructor permission. For doctoral performance majors. May be repeated to a maximum of twenty-four semester hours.

MUS 6980r. Dissertation (1–12). (S/U grade only). Prerequisite: Instructor permission.

MUS 8960r. Doctoral Diagnostic Examination (0). (P/F grade only.) Prerequisite: Instructor permission. May be repeated one time only.

MUS 8964r. Doctoral Preliminary Examination (0). (P/F grade only.) Prerequisite: Instructor permission.

MUS 8965r. Doctoral Performance Comprehensive Examination (0). (P/F grade only.) Prerequisites: MUS 8964 and instructor permission.

MUS 8966r. Master's Comprehensive Examination (0). (P/F grade only.) Prerequisite: Instructor permission.

MUS 8976r. Master's Thesis Defense (0). (P/F grade only.) Prerequisite: Instructor permission.

MUS 8985r. Dissertation Defense [also used for Treatise Defense–Doctor of Music] (0). (P/F grade only.) Prerequisite: Instructor permission.

Music Theory

MUT 5051. Graduate Theory Survey (3). This course is a review of the tonal materials of the period of common harmonic practice and required of all graduate music majors unless exempted by examination. Credit earned in MUT 5051 does not apply to credit-hour requirements of any degree in the College of Music.

MUT 5151. Introduction to Graduate Study in Music Theory (3). This course focuses on basic principles of music theory and their application to graduate study in music.

MUT 5357. Jazz Theory/Arranging I (3). Prerequisite: MUE 5486 or instructor permission. This course is designed to promote skills in arranging for the jazz ensemble.

MUT 5358. Jazz Theory/Arranging II (3). Prerequisite: MUT 5357 or instructor permission. This course focuses on advanced skills in arranging for the jazz ensemble.

MUT 5445. Contrapuntal Genres (3). This course covers eighteenth-century contrapuntal genres, analysis, and writing skills.

MUT 5573. Music Since World War II (3). This course covers recent musical techniques and aesthetics as revealed in selected works.

MUT 5578. Popular Music Analysis (3). This is an analytical and music theoretical study of popular music, including consideration of form, melody, and harmony, meter and rhythm, timbre and production aspects, and recorded vs. live performance elements.

MUT 5587. Classic, Romantic, and 20th-Century Styles (3). This course covers Classic, Romantic, and twentieth-century styles, analysis, and writing skills.

MUT 5618. Analysis of Masterworks 1700–1950 (3). This course analytically studies masterworks from Bach to Bartok, including consideration of style, harmony, form, scoring, and theory.

MUT 5619. Vocal Forms (3).

MUT 5625. Instrumental Forms (3). This course studies the evolution of the concerto and the symphony.

MUT 5627. Introduction to Schenkerian Analysis (3).

MUT 5628. Atonal Analysis (3). This course focuses on techniques for the analysis of non-serial atonal music.

MUT 5629. Schenkerian Theory and Analysis II (3). Prerequisite: MUT 5627. This advanced course studies analytical techniques as proposed by Heinrich Schenker.

MUT 5646r. Jazz Improvisation I (1). Prerequisite: Music reading. This course focuses on skills in beginning jazz improvisation. May be repeated to a maximum of three semester hours.

MUT 5647r. Jazz Improvisation II (1). Prerequisite: MUT 5646 or instructor permission. This course focuses on advanced skills in jazz improvisation. May be repeated to a maximum of three semester hours.

MUT 5655. Writing Skills: 16th-Century Counterpoint (3). This course examines sixteenth-century imitative writing styles.

MUT 5656. Writing Skills: Fugue (3). This course examines fugal writing styles.

MUT 5665. Jazz Styles and Analysis (2). This course traces the development of the jazz ensemble from a historical context. Students learn about the Creole population in New Orleans in the late 1800s and observe how the early bands developed a concept of playing based on the culture of the time.

MUT 5673. Musical Meaning and Performance (3). Prerequisite: The Music Theory Placement Exam or MUT 5051. This course is a study of how music communicates its internal and contextual meanings to the listener and how this research relates to the performance of the musical works.

MUT 5751–5752. Pedagogy of Music Theory (three hours each). This course introduces basic concepts in the teaching of music theory.

MUT 5760. History of Music Theory (3). This course overviews music theory from Greek Antiquity through the 19th-century and surveys historically significant theorists and treatises.

MUT 6937r. Doctoral Seminar in Music Theory (3). May be repeated to a maximum of nine semester hours.

Music Therapy

MUY 5305. Medical Music Therapy (3). In this course, students learn to understand the role and scope of music therapy in medical treatment; learn to design music activities in medical situations to reduce pain, anxiety, and distress; participate in field experiences observing medical music therapy practices in a hospital setting; and learn medical documentation for clinical music therapy.

MUY 5306r. Music Therapy in Behavioral Health and Psychosocial Care (3). This course focuses on the research, theory, and clinical practice of music therapy to address the behavioral health needs and/or psychosocial care in patients, families, and care givers. May be repeated to a maximum of six semester hours.

MUY 5411. Music in Counseling (2). This course focuses on techniques of using music in counseling juveniles and adults.

MUY 5612. Music Therapy Drumming (1). This course emphasizes group drumming and improvisation techniques; applications for therapy; and group drumming leadership skills for use in wellness, counseling, and other music therapy settings.

MUY 5705. Assessment Instruments in Music Therapy/Music Education (2). This course studies the practical application of standardized instruments assessing educational and social skills of children with learning problems in music situations.

MUY 5935. Seminar in Music Therapy (2). This course focuses on research problems of music in therapy and special education.

MUY 5941r. Advanced Clinical Placement in Music Therapy (2). Prerequisite: Completion of a music therapy internship. This course focuses on the development of advanced competence in clinical music therapy practice, particularly in the areas of (a) clinical supervision, (b) clinical administration, (c) clinical skills, and (d) personal development and professional role. May be repeated to a maximum of six semester hours.

MUY 5946. Graduate Clinical Project (6). This course consists of a twenty-hour week clinical practicum emphasizing the demonstration of music therapy techniques, applied clinical analysis, and documentation of clinical results. Required of all music therapy non-thesis degree master's candidates. Concurrent registration in MUS 8966 required.

Applied Music

MVO 5050r. Applied Music Graduate Coaching (1–2). All instruments. Principal only.

MVO 5055r. Applied Music Graduate Coaching (2–4). All instruments. Performance major only.

MVK 5151r. Class Piano (1). Prerequisites: Audition and permission of coordinator of class piano. This course is for music education majors other than keyboard principals. Instruction based on individually diagnosed needs and prescribed materials. May be repeated to a maximum of two semester hours.

MVV 5151r. Class Voice (1). Prerequisite: Instructor permission. This course is for dance and theatre majors and focuses on fundamentals of voice production. May be repeated to a maximum of two semester hours.

MVS 5156. Beginning Class Guitar (1). This course is for beginning graduate guitar students. Includes beginning acoustical guitar techniques, guitar accompaniment skills, and song leading.

MV(B, H, K, O, P, S, V, W) 5250r–5259r. Applied Music Secondary (two hours each). This course consists of private instruction for students whose curriculum requires study of a secondary instrument. May be repeated to a maximum of four semester hours. Credit may be modified by electing MVO 5250r (1), All Instruments. All MVH courses may be taken for one to two credit hours and be repeated to a maximum of eight hours.

- MVB 5251r. App Mus Sec, Trumpet
- MVB 5252r. App Mus Sec, French Horn
- MVB 5253r. App Mus Sec, Trombone
- MVB 5255r. App Mus Sec, Tuba
- MVH 5256r. App Mus Sec, Plucked Instruments (1–2)
- MVH 5257r. App Mus Sec, Bowed Strings (1–2)
- MVK 5251r. App Mus Sec, Piano
- MVK 5252r. App Mus Sec, Harpsichord
- MVK 5253r. App Mus Sec, Organ
- MVO 5250r. Modified Credit, All Instruments (1)
- MVP 5251r. App Mus Sec, Percussion
- MVS 5251r. App Mus Sec, Violin
- MVS 5252r. App Mus Sec, Viola
- MVS 5253r. App Mus Sec, Violoncello
- MVS 5254r. App Mus Sec, Double Bass
- MVS 5255r. App Mus Sec, Harp
- MVS 5256r. App Mus Sec, Guitar
- MVV 5251r. App Mus Sec, Voice
- MVV 5251r. App Mus Sec, Flute
- MVV 5252r. App Mus Sec, Oboe
- MVV 5253r. App Mus Sec, Clarinet
- MVV 5254r. App Mus Sec, Bassoon
- MVV 5255r. App Mus Sec, Saxophone

MV—(B, J, K, O, P, S, V, W) 5350r–5359r. Applied Music Principal (two hours each). This course consists of private instruction of the principal instrument for students whose major is not performance. May be repeated to a maximum of twelve semester hours. Credit may be modified by electing MVO 5350r (1), All Instruments.

- MVB 5351r. App Mus Prin, Trumpet
- MVB 5352r. App Mus Prin, French Horn
- MVB 5353r. App Mus Prin, Trombone
- MVB 5354r. App Mus Prin, Baritone Horn
- MVB 5355r. App Mus Prin, Tuba
- MVJ 5350r. App Mus Prin, Piano, Jazz
- MVJ 5351r. App Mus Prin, Voice, Jazz
- MVJ 5353r. App Mus Prin, Guitar, Jazz
- MVJ 5354r. App Mus Prin, Bass, Jazz
- MVJ 5356r. App Mus Prin, Saxophone, Jazz
- MVJ 5357r. App Mus Prin, Trumpet, Jazz
- MVJ 5358r. App Mus Prin, Trombone, Jazz
- MVJ 5359r. App Mus Prin, Percussion, Jazz
- MVK 5351r. App Mus Prin, Piano
- MVK 5352r. App Mus Prin, Harpsichord
- MVK 5353r. App Mus Prin, Organ
- MVO 5350r. Modified Credit, All Instruments (1)
- MVP 5351r. App Mus Prin, Percussion
- MVS 5351r. App Mus Prin, Violin
- MVS 5352r. App Mus Prin, Viola
- MVS 5353r. App Mus Prin, Violoncello
- MVS 5354r. App Mus Prin, Double Bass
- MVS 5355r. App Mus Prin, Harp
- MVS 5356r. App Mus Prin, Guitar
- MVV 5351r. App Mus Prin, Voice
- MVV 5351r. App Mus Prin, Flute
- MVV 5352r. App Mus Prin, Oboe
- MVV 5353r. App Mus Prin, Clarinet
- MVV 5354r. App Mus Prin, Bassoon
- MVV 5355r. App Mus Prin, Saxophone

MV—(B, J, K, O, P, S, V, W) 5450r–5456r. Applied Music Major (four hours each). This course consists of private instruction of the major instrument for performance majors. May be repeated to a maximum of twenty-four semester hours. Credit may be modified by electing MVO 5450r (2), All Instruments. Credit for MVV 5451r is for three semester hours.

- MVB 5451r. App Mus Maj, Trumpet
- MVB 5452r. App Mus Maj, French Horn
- MVB 5453r. App Mus Maj, Trombone
- MVB 5454r. App Mus Maj, Baritone Horn
- MVB 5455r. App Mus Maj, Tuba
- MVJ 5457r. App Mus Maj, Trumpet, Jazz
- MVJ 5459r. App Mus Maj, Percussion, Jazz
- MVK 5451r. App Mus Maj, Piano
- MVK 5453r. App Mus Maj, Organ
- MVO 5450r. Modified Credit, All Instruments (2).
- MVP 5451r. App Mus Maj, Percussion
- MVS 5451r. App Mus Maj, Violin
- MVS 5452r. App Mus Maj, Viola
- MVS 5453r. App Mus Maj, Violoncello
- MVS 5454r. App Mus Maj, Double Bass
- MVS 5455r. App Mus Maj, Harp
- MVS 5456r. App Mus Maj, Guitar
- MVV 5451r. App Mus Maj, Voice
- MVV 5452r. App Mus Maj, Oboe
- MVV 5453r. App Mus Maj, Clarinet
- MVV 5454r. App Mus Maj, Bassoon
- MVV 5455r. App Mus Maj, Saxophone
- MVS 5505r. **Orchestral Repertoire for Violin (1).** Prerequisite: Instructor permission. May be repeated to a maximum of two semester hours.
- MVS 5550r. **String Repertory (0–1).** This course is required of string performance majors. May be repeated to a maximum of four semester hours. May be repeated in the same semester.
- MVS 5650. **Violin Pedagogy (1).** This course gives students the opportunity to analyze the methods, materials and approaches to violin pedagogy; to develop their teaching skills in violin performance; and to observe professional educators in various settings.
- MVV 5552r. **Musical Theatre Repertoire (1).** Prerequisite: Instructor permission. This course is for musical theatre majors. May be repeated to a maximum of four semester hours.
- MVS 5556r. **Guitar Repertory (1).** Prerequisite: Instructor permission. This course is required of guitar performance majors. May be repeated to a maximum of four semester hours.
- MVK 5605. **Organ/Harpsichord Pedagogy (2).** Prerequisite: Instructor permission. This course equips students with teaching skills in organ/harpsichord.
- MVO 5650. **Pedagogy for Winds and Percussion (3).** This course focuses on the principles and techniques of wind and percussion pedagogy.
- MVK 5651. **Piano Pedagogy I (3).** Piano pedagogy subjects.
- MVV 5651. **Seminar in Vocal Pedagogy (2).** Prerequisite: MVV 4641.
- MVV 5651. **Flute Pedagogy (0–1).** This course covers topics specific to teaching and playing the flute, including breathing, posture, embouchure, scales, fingers, sound, dynamics, tuning, repertoire, styles, music history, vibrato and other related topics.
- MVK 5652. **Piano Pedagogy II (3).** Prerequisite: MVK 5651. Intermediate piano pedagogy subjects.
- MVK 5661. **Advanced Piano Pedagogy I (3).** Prerequisite: MVK 5652 or instructor permission. This course consists of current and expanded pedagogy concepts and materials and techniques for teaching advanced or adult students.
- MVK 5662. **Advanced Piano Pedagogy II (3).** Prerequisite: MVK 5661. This course consists of current and expanded pedagogy concepts and materials and techniques for teaching advanced or adult students.
- MVK 5671r. **Practicum in Piano Pedagogy (2).** This course offers practical experience in individual and group teaching as well as supervision and administration of a piano studio. May be repeated to a maximum of eight semester hours.
- MVK 5681r. **Applied Music Major: Piano Pedagogy (4).** This course offers private instruction for piano pedagogy majors. May be repeated to a maximum of twenty-four semester hours.
- MVV 5705r. **Introduction to the Baroque Flute (1).** Prerequisite: Instructor permission. This course focuses on the development of basic performance skills on the baroque flute and commensurate stylistic techniques through a graduated study of available eighteenth-century pedagogic and performance materials. May be repeated to a maximum of four semester hours.
- MVV 5706r. **Introduction to the Baroque Recorder (1).** Prerequisite: Instructor permission. This course focuses on the development of performance skills on the Baroque recorder and commensurate stylistic techniques through a graduated study of available eighteenth-century pedagogic and performance materials. May be repeated to a maximum of four semester hours.

MVK 5710. Piano Accompanying—Vocal (1). This course offers students techniques, artistic skills, and repertory for vocal accompanying.

MVK 5711. Piano Accompanying—Instrumental (1). This course offers students techniques, artistic skills, and repertory for instrumental accompanying.

MVK 5730r. Applied Music Major, Vocal Accompanying (4). This course offers private instruction for accompanying majors. The course studies the art song and operatic literature from the accompanist's viewpoint. May be repeated to maximum of twenty-four semester hours.

MVK 5731r. Applied Music Major, Instrumental Accompanying (4). This course offers private instruction for accompanying majors. The course studies solo instrumental literature and chamber music for strings and winds with piano from the accompanist's viewpoint. May be repeated to a maximum of twenty-four semester hours.

MVK 5732r. Applied Music Opera Coaching (4). This course provides students with intensive training in the applied music skills necessary for a career in opera. May be repeated to a maximum of eight semester hours.

MVK 5745. Techniques of Vocal Coaching (2). This course incorporates techniques and specific skills of accompanying and coaching vocal music, especially art songs.

MVK 5746. Techniques of Coaching Chamber Music (2). This course offers techniques and specific skills of accompanying and coaching instrumental music.

MVK 5747. Techniques of Opera Coaching (2). This course offers techniques and specific skills of playing and coaching operatic repertory.

MVV 5751r. Advanced Piccolo Class (1). This course helps students develop an understanding and concept of piccolo playing in relation to the flute, including the ability to transfer easily between the two instruments. May be repeated to a maximum of eight (8) credit hours.

MVV 5752r. Advanced Low Flute Class (1). This course helps students develop an understanding and concept of low flute playing in relation to the flute, including the ability to transfer easily between the instruments.

MVV 5753r. Advanced Baroque Flute Class (1). This course enhances students' knowledge of performance practice, solo and ensemble literature, and the primary sources available to modern traverso players while also building on the technical and tonal skills acquired during the first semester of study and deepens their knowledge about the historical background through research.

MVK 5935r. Continuo Playing Keyboard (1). Prerequisite: Instructor permission. May be repeated to a maximum of two semester hours.

MVK 5936. Service Playing (2). Prerequisite: Instructor permission. This course is open to all upper-division organ majors and principals.

MV—(K, S) 5955. Certificate Recital (zero hours each). (S/U grade only). Prerequisite: Instructor permission.

MV—(B, K, P, S, W) 5976–5977. Master's Recital (two hours each). (S/U grade only). This course is required of master's performance majors in lieu of thesis. 5976: Recital Preparation; 5977: Master's Recital.

MVV 5976r. Master's Voice Recital Coaching (2). Prerequisite: Permission of voice faculty and instructors of course by audition. This course focuses on selection and preparation of voice recital repertoire. May be repeated to a maximum of eight semester hours.

MVV 5977. Master's Recital (Voice) (0). (S/U grade only). This course is required of master's voice performance majors in lieu of thesis.

MVK 5973r. Master's Recital, Vocal Accompanying (1). (S/U grade only). This course is required of master's accompanying majors in lieu of thesis. May be repeated to a maximum of three semester hours.

MVK 5974r. Master's Recital, Instrumental Accompanying (1). (S/U grade only). This course is required of master's accompanying majors in lieu of thesis. May be repeated to a maximum of three semester hours.

MVK 5975. Master's Recital: Piano Pedagogy (0). (S/U grade only). This course is required of piano pedagogy majors in lieu of thesis.

MVO 6060. Applied Music Graduate Coaching (1–2). Principal only. All instruments.

MVO 6065. Applied Music Graduate Coaching (2–4). Performance Major only. All instruments.

MV—(B, K, O, P, S, V, W) 6260r–6266r. Applied Music Secondary (two hours each). Private instruction (See course description for MV(B, K, O, P, S, V, W) 5250–5256 series.) For students whose curriculum requires study of a secondary instrument. May be repeated to maximum of four semester hours. Credit may be modified by electing MVO 6260r (1), All Instruments.

MV—(B, K, O, S, V, W) 6360r–6369r. Applied Music Principal (two hours each). Private instruction. Principal instrument. (See course description for MV[B, J, K, O, P, S, V, W] 5350–5356 series.) For students whose major is not performance. May be repeated to a maximum of twelve semester hours. Credit may be modified by electing MVO 6360r (1), All Instruments.

MV—(B, K, O, P, S, V, W) 6460r–6469r. Applied Music Major (four hours each). Prerequisite: Admission to MV(B, K, O, P, S, V, W) 6460r–6469r series by qualifying audition. For performance majors. Private instruction. Major instrument. May be repeated to a maximum of twenty-four semester hours. Credit for MVO 6460r (2) is available for all instruments.

MVB 6461r. App Mus Maj, Trumpet

MVB 6462r. App Mus Maj, French Horn

MVB 6463r. App Mus Maj, Trombone

MVB 6464r. App Mus Maj, Euphonium

MVB 6465r. App Mus Maj, Tuba

MVK 6461r. App Mus Maj, Piano

MVK 6463r. App Mus Maj, Organ

MVO 6460r. Modified Credit, All Instruments (2).

MVP 6461r. App Mus Maj, Percussion

MVS 6461r. App Mus Maj, Violin

MVS 6462r. App Mus Maj, Viola

MVS 6463r. App Mus Maj, Violoncello

MVS 6464r. App Mus Maj, Double Bass

MVS 6466r. App Mus Maj, Guitar

MVS 6469r. App Mus Maj, Certificate

MVV 6461r. App Mus Maj, Voice

MVV 6461r. App Mus Maj, Flute

MVV 6462r. App Mus Maj, Oboe

MVV 6463r. App Mus Maj, Clarinet

MVV 6464r. App Mus Maj, Bassoon

MVV 6465r. App Mus Maj, Saxophone

MVS 6560r. String Repertory (0–1). This course is required of string performance majors. May be repeated to a maximum of four semester hours.

MVS 6566r. Guitar Repertory (1). Prerequisite: Instructor permission. This course is required of guitar performance majors. May be repeated to a maximum of four semester hours.

MVV 6661. Vocal Pedagogy Seminar I (3). Prerequisite: MVV 5651 or equivalent. This course focuses on techniques, materials, and repertoire for college/university voice teaching.

MVV 6662. Vocal Pedagogy Seminar II (3). Prerequisite: MVV 6661. This course focuses on advanced techniques, materials, and repertoire for college/university voice teaching. Includes observation and teaching with laboratory situations.

MVK 6733r. Applied Music Major Accompanying (4). Prerequisite: Qualifying audition. Private instruction. May be repeated to a maximum of thirty-two semester hours.

MVV 6978r. Doctoral Voice Recital and Repertoire Coaching (2). Prerequisite: Permission of voice faculty by successful audition into MVO 6065 or MVV 6461r. This course focuses on exploration, selection, and preparation of voice recital repertoire. May be repeated to a maximum of twelve semester hours.

MV—(B, K, P, S, V, W) 6985–6989. Doctoral Recital (one to four hours each). (S/U grade only). This course is required of all doctoral performance majors. Alternative modes of fulfilling MV(B, K, S, V) 6989 requirements are: concerto recital program with large instrumental ensemble, performance with large chamber ensemble, informal reading, performance of a major operatic role with orchestral accompaniment, conducting performance, and approved off-campus performance. MV(B, K, P, S, V, W) 6985, Public Recital. MV(B, K, P, S, V, W) 6986, Public Recital. MV(B, K, P, S, V, W) 6987r, Studio Recital/Lecture Recital May be completed twice in given term. MV(B, K, P, S, V, W) 6988, Chamber Music Recital. MV(B, K, S, V) 6989, Performance of major work with large ensemble accompaniment.

MUSIC EDUCATION:
see Music

MUSIC HISTORY/MUSICOLOGY:
see Asian Studies; Music

MUSIC LITERATURE, THEORY, THERAPY:
see Music

Graduate Interdisciplinary Program in NEUROSCIENCE

COLLEGE OF ARTS AND SCIENCES

Website: <http://neuro.fsu.edu>

Director: Dr. Lisa Eckel

The program in neuroscience is an interdepartmental and interdisciplinary research and graduate training program that offers training leading to the PhD degree in neuroscience. Program faculty members are based in four departments: biological science, biomedical sciences, mathematics, and psychology. There is no master's degree in neuroscience, but MS degrees with a concentration in neuroscience are available through the participating departments for work completed with neuroscience program faculty. The program was established to promote basic research and to provide graduate education in neuroscience via a close mentoring relationship between students and faculty. Students entering the program choose a faculty advisor and enroll in that advisor's department. Students are able to begin hands-on research immediately while discovering modern neuroscience through courses covering a broad range of approaches, from molecular to behavioral. The requirements for the neuroscience degree are uniform across departments so changing advisors and departments later is possible, for example, to begin specialized PhD dissertation research. Interdisciplinary research training is available involving molecular, cellular, physiological, and behavioral approaches to the study of a broad array of research areas, including sensory systems, ingestive behavior, human neuroscience, animal models of cognition, molecular genetics, proteomics, membrane biophysics, neurobiology of brain injury and disease, neuroendocrinology, social behavior, stress, and drug addiction. Fellowships and positions on two NIH-funded training grants are available on a competitive basis to students in the program. The program maintains specialized research support services and personnel and provides special courses and symposia on contemporary neuroscience issues. Each semester the program brings prominent neuroscientists to Florida State University to give colloquia and hold informal discussions with graduate students and faculty. Details on faculty/student research and program events may be found on the neuroscience program website at <http://neuro.fsu.edu>.

Admission Requirements

The admission process begins at the neuroscience program Web site at <http://neuro.fsu.edu> where there are links to the online admissions system of the Florida State University Office of Admissions. All application materials and supporting documentation should be uploaded into the FSU Online Application system at the time of application. Applications must be complete with all supporting documents by December 1 for the following Fall admission. Applicants must meet minimum criteria, including a 3.0 undergraduate upper-division grade-point average (GPA) and have relevant research experience. Required supporting documents include the applicant's statement of purpose, three recent letters of recommendation from individuals who are able to assess the applicant's academic and research potential, and unofficial transcripts. A Graduate Record Exam (GRE) waiver may be approved for select students who meet criteria for demonstrating success and aptitude for research and academic preparation. In addition to the above, international students also must meet University standards on the Test of English as a Foreign Language (TOEFL). Applicants select three neuroscience faculty members as their possible initial advisor, and ideally should contact these faculty members before applying. A list of faculty who are accepting graduate students can be found on the program website at: <http://neuro.fsu.edu>. Additional information is available on the program website or by request to the program office.

Degree Requirements

The direction and supervision of doctoral work resides primarily with the major professor and supervisory committee. An introductory core curriculum and a variety of specialized courses may be selected to fulfill classroom requirements. Program curriculum is continually updated. Please refer to the graduate student handbook posted at <http://neuro.fsu.edu> for the most current requirements.

Overall requirements for the Doctor of Philosophy (PhD) degree in neuroscience are:

1. Successful completion of the doctoral preliminary exam
2. After admission to doctoral candidacy, a minimum of twenty-four credit hours of dissertation credit
3. At least two semesters of teaching experience
4. At least two seminar presentations in addition to the dissertation defense. Students are encouraged to present their work at regional, national, or international meetings.

5. Submission and approval of a doctoral prospectus
6. Completion of original research work in neuroscience
7. Submission and successful defense of an acceptable dissertation

For additional information, see <http://neuro.fsu.edu> or the neuroscience listings in the Biology, Psychology, and Biomedical Sciences in this *Graduate Bulletin*.

Graduate Program in NURSE ANESTHESIA

COLLEGE OF APPLIED STUDIES

Website: <https://pc.fsu.edu/nap/program>

Program Administrator: Stacey VanDyke, DNP, MSN, CRNA; **Assistant Administrator:** Lonnie Hodges, DNP, CNRA; **Faculty:** Hodges, Smith, Stewart, VanDyke

The College of Applied Studies offers a Nurse Anesthesia Program (NAP) leading to the Master of Science in Nurse Anesthesia (MSNA) degree. The graduate degree curriculum provides advanced study in anesthesiology, pharmacology, chemistry, research concepts/methods, and an intensive clinical application. The NAP's mission is to advance the human sciences through implementing a philosophy of scientific education infused by passion, and applying clinical education and practice toward the betterment of patients in the local, national, and global community. The program endeavors to motivate and instill dedication to serving public and private health systems through application of technical expertise underpinned by advanced scientific principles. The centrality of character as it manifests itself on the personal, professional, scientific, and community level is a program focal point. Exceptional clinical and didactic educational experiences are provided to students enabling the development of lifelong habits essential to continued success in the field of nurse anesthesiology.

Master's Degree Program

Florida State University's Nurse Anesthesia Program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA). The objective of the NAP is to educate critical care nurses in the discipline of anesthesia. Learning experiences include interactive classroom instruction, research, and individualized clinical practicum under the close supervision of certified academic and clinical faculty. Student Registered Nurse Anesthetists (SRNAs) are encouraged to collaborate with faculty on research and clinical program development. The master's degree program is offered via an on-campus program. Students obtaining the MSNA degree from Florida State University are required to attend the program full-time and complete nine-to-five semester hours in seven semesters.

Facilities

The Nurse Anesthesia Program is housed in the Bayside Building of the Panama City Campus. The main classroom has a tranquil view of the bay and has easy access to a landing with benches and a picnic table overlooking the beautiful water. The simulation lab is housed within the Technology Building and is equipped with a human patient simulator and over \$200,000 in new equipment designed to simulate real clinical procedures.

The student experience is enhanced by the excellent resources available at the FSU Panama City campus. The FSU Panama City Library and Learning Center facility has 6,300 square feet overlooking the beautiful bay, including seating for 119 within a study space and a classroom. Sixty-one computer workstations and 5,200 volumes are available for student use. A full-time librarian, a qualified assistant librarian, and several support staff offer a wide range of standard library services including reference services, instruction, research consultations, course reserves, interlibrary loan, and often same day service Monday through Thursday from FSU Tallahassee campus. All Panama City campus faculty and students have access to technology through the Library and Learning Center in the Holley Academic Center, computers outside the Student Affairs Offices, computer labs, and specialized academic labs. Through FSU accounts, students have internet access via wireless access points on campus.

In addition to dedicated and fully equipped classrooms on a modern campus, there are multiple approved clinical sites located in various geographical regions of Florida and Alabama. The students have access to a variety of clinical experiences to include specialty training in pediatric, cardiac, obstetric, and other unique disciplines in anesthesia. All sites are contractually affiliated with FSU and permit utilization of their facilities and patient populations by the FSU nurse anesthesia graduate students to engage in clinical education within their facilities. In each facility, mutual vetting of practitioner and student occurs through formalized processes that are dependent on mutual cooperation and agreement between the facility and the University.

The program identifies a clinical coordinator at each clinical facility to coordinate student experiences within the site based on individual student needs. Clinical coordinators are approved by the University and must meet the qualifications set forth by the COA.

Requirements

University Requirements

All regular requirements of the University must be met. Admission to graduate study is a two-fold evaluation process. The Office of Admissions determines eligibility for admission to the University and the Nurse Anesthesia Admissions Committee determines admissibility to the degree program. Applicants for admission to the master's degree program must meet the University's minimum standard of a 3.0 upper division GPA and completion of the verbal, quantitative, and writing sections of the Graduate Record Examination (GRE) before an application will be considered by the program. Meeting the minimum requirements does not guarantee acceptance for graduate study in the program as admission is competitive. Prospective students must apply to the University and pay the University application fee before their file will be reviewed at the Program level. Applicants must submit copies of their official transcripts from all post-secondary schools attended and official GRE scores from the Educational Testing Service to the Office of Graduate Admissions. Admission is for the Fall semester. There are additional requirements and procedures that are required for admission to the program. Please see the program website for full application requirements, submission dates of application materials, and additional information at <https://pc.fsu.edu/academics/graduate-programs/nurse-anesthesia/nap-admissions-requirements>. Final admission to the University is subject to approval by the Office of Admissions.

Program Requirements

Admission to the Florida State University Nurse Anesthesia Program is a highly competitive process and requires a face-to-face interview if invited before admission. The program requires an individual applying for a master's degree to hold a bachelor's degree in nursing obtained from a regionally accredited institution of higher education in the United States. Applicants must also hold a current, valid, unrestricted, professional nursing license in one jurisdiction of the United States and have at least one year of recent Registered Nurse (RN) experience in a critical care setting. Applicants who are accepted into the master's degree program must possess and maintain a current unrestricted Registered Nurse (RN) license in accordance with the Enhanced Nurse Licensure Compact (eNLC) which was implemented in Florida on January 19, 2018.

Statement of Professional Conduct

While enrolled in the College of Applied Studies Master of Science in Nurse Anesthesia graduate program, students are expected to demonstrate conduct and behavior which conforms with the Nurse Practice Act of the State of Florida, the Florida State University Student Conduct Code, Workplace Violence Guidelines, the Academic Honor Code, and all other applicable rules and policies of the University. The College of Applied Studies reserves the right to refuse or discontinue the enrollment of any student whose conduct or behavior is so negative, disruptive, or destructive as to compromise the work of fellow students, the effectiveness of the faculty, and/or the ability to work positively in a collaborative environment consistent with the aforementioned policies and guidelines. Faculty members continually assess each student's professional performance. The program insists that graduate student nurse anesthetists conduct themselves as professionals at all times. Students must adhere to the code of ethics for Nurse Anesthetists, located at [https://www.aana.com/docs/default-source/practice-aana-com-web-documents-\(all\)/code-of-ethics-for-the-crna.pdf](https://www.aana.com/docs/default-source/practice-aana-com-web-documents-(all)/code-of-ethics-for-the-crna.pdf).

Professionalism includes, but is not limited to, the following. The Student Registered Nurse Anesthetist (SRNA) demonstrates:

- **Courtesy:** Displays mutual respect in working with others
- **Honesty:** Is honest and fair in his/her actions
- **Punctuality:** Arrives to class on time, arrives to clinicals in time to appropriately prepare
- **Accountability:** Behaves in an ethical, responsible, and dependable manner
- **Motivation:** Demonstrates incentive for independent learning
- **Appropriate use of language:** No use of profanity or derogatory/defamatory/discriminatory terminology
- **Positive attitude:** Demonstrates initiative and enthusiasm
- **Personal cleanliness/grooming**
- **Willingness to receive instruction and professional criticism**
- **Vigilance AT ALL TIMES**
- **Integrity:** Adheres to moral and ethical codes of conduct

- Humanistic/Altruistic concern for the welfare of patients and colleagues

Failure to meet “Student Professional Conduct” criteria may result in a verbal warning, written counseling statement, academic jeopardy, or recommendation to the Student Promotions Committee for dismissal from the program.

Academic Performance/Academic Honor Code

College of Applied Studies graduate students are expected to make satisfactory academic progress consistent with the University’s minimum retention standards for graduate studies. Student and faculty responsibilities for maintaining academic honesty and integrity are outlined in The Florida State University Academic Honor Code and Student Conduct Code. The Master of Science in Nurse Anesthesia graduate program reserves the right to refuse or discontinue the enrollment of any student who fails to maintain the academic integrity of the program as described in these codes.

Academic Requirements

Every student will undergo a series of examinations while in the Program: verbal quizzes, reports/projects, demonstration/return demonstration, performance evaluations, discussion, written and computerized examinations, oral comprehensive examinations, Self-Evaluation Examination, and the National Certification Examination. No course for which a student receives a grade of unsatisfactory or a “B-” (2.75 quality points) or below may count toward the degree requirements of the Master of Science in Nurse Anesthesia. Students in the graduate program are required to maintain a 3.0 grade point average in all MSNA coursework each semester. Failure to do so will result in the student’s placement on academic probation. During the semester in which the student is on academic probation she/he is expected to improve the MSNA GPA to a 3.0 or greater. A passing score of 82% or better must be achieved for each course. The inability to meet academic requirements will result in dismissal from the program. Graduate education, and Nurse Anesthesia education in particular, is a major undertaking academically, professionally, emotionally, and financially. Classroom time, clinical time, and study time average around sixty four hours per week. As such, this is a full time graduate program and outside employment is not consistent with the demands and expectations of such a program. Applicants are strongly encouraged to research all aspects of this undertaking carefully.

Reinstatement

In order to be reinstated into the MSNA graduate program after having been dismissed for academic reasons, the student is required to reapply to the program.

Definition of Prefix

NGR—Nursing: Graduate

Graduate Courses

NGR 6002. Advanced Health Assessment (1). Prerequisite: Admission to the nurse anesthesia program. This course includes the history, physical, and psychological assessment of signs and symptoms, pathophysiologic changes, and psychosocial variations of a patient as they relate to preoperative assessment, intraoperative management and postoperative management of patients receiving anesthesia. The course provides students with the cognitive and psychomotor skills necessary to perform advanced health assessment for patients undergoing anesthesia.

NGR 6400. Chemistry, Biochemistry, and Physics (3). Prerequisites: Admission to the nurse anesthesia program and undergraduate coursework in chemistry, biochemistry, or physics. This course investigates the concepts and principles of chemistry, biochemistry and physics that are fundamental to anesthesia practice, medical equipment and operating room safety.

NGR 6404. Anatomy, Physiology/Pathophysiology I (3). Prerequisites: Admission to the nurse anesthesia program and undergraduate course work in anatomy and physiology/pathophysiology. This course presents, analyzes/evaluates anatomy, physiology/pathophysiology of the respiratory and renal systems. The course also examines fluid and electrolyte balance, abnormalities and management in the acute and chronically ill patient.

NGR 6405. Anatomy, Physiology/Pathophysiology II (3). Prerequisite: NGR 6404. This course presents, analyzes/evaluates anatomy, physiology/pathophysiology of the cardiovascular, neurological, and hepatic systems. The course also examines acid base status, abnormalities and management in the acute and chronically ill patient.

NGR 6406. Anatomy, Physiology/Pathophysiology III (3). Prerequisite: NGR 6405. This course presents, analyzes/evaluates anatomy, physiology/pathophysiology of the cardiovascular, neurological, and hepatic systems. The course also examines acid base status, abnormalities and management in the acute and chronically ill patient.

NGR 6420. Basic Principles of Anesthesia (3). Prerequisites: Admission to the nurse anesthesia program on completion of an undergraduate nursing degree. This course presents principles relevant to the practice of anesthesia: history of anesthesia, scope of anesthetic practice, documentation, preoperative patient evaluation and preparation, anesthesia technique, airway assessment and management, anesthesia delivery systems, positioning of the patient for anesthesia and surgery, effects of coexisting disease on anesthetic administration, physiologic response to anesthesia, intraoperative anesthetic management, anesthesia administration in locations outside the operating room, postoperative patient complications, postoperative patient management.

NGR 6424. Advanced Principles of Anesthesia (3). Prerequisite: NGR 6420. This course analyzes/evaluates principles relevant to acute care and the practice of anesthesia for the following specific populations: orthopedic patients, trauma patients, burn patients, ENT patients, spinal cord injury patients, patients with neuromuscular disease, chronic pain patients, patients being monitored with evoked potentials, patients undergoing organ transplant, and patients with coagulopathies. The course also explores the anesthesia techniques of neuraxial and regional anesthesia.

NGR 6431L. Anesthesia Practicum I (2). (S/U grade only). Prerequisites: Admission to nurse anesthesia program, completion of orientation with appropriate signed documentation, current medical malpractice coverage as SRNA, valid license as RN in the state of FL, and certification in BLS, ACLS, and PALS. This course allows for clinical application of principles of nurse anesthesia. Students are precepted in the perioperative clinical site. Experiences include application of skills specific to the role of nurse anesthetist. Important concepts include anatomical, physiological and pharmacological principles.

NGR 6432L. Anesthesia Practicum II (6). (S/U grade only). Prerequisites: NGR 6431L, current medical malpractice coverage as a SRNA, a valid license as a registered nurse in the state of Florida, and certification in BLS, ACLS, and PALS. This course allows for clinical application of principles of nurse anesthesia. Students are precepted in the perioperative clinical site. Experiences include application of skills specific to the role of nurse anesthetist. Important concepts include anatomical, physiological, pathophysiological and pharmacological principles.

NGR 6433L. Anesthesia Practicum III (8). (S/U grade only). Prerequisites: NGR 6432L, current medical malpractice coverage as a SRNA, a valid license as a registered nurse in the state of Florida, and certification in BLS, ACLS, and PALS. This course allows for clinical application of principles of nurse anesthesia. Students are precepted in the perioperative clinical site. Experiences include application of skills specific to the role of nurse anesthetist. Important concepts include anatomical, physiological, pathophysiological and pharmacological principles.

NGR 6434L. Anesthesia Practicum IV (10). (S/U grade only). Prerequisites: NGR 6433L, current medical malpractice coverage as a SRNA, a valid license as a registered nurse in the state of Florida, and certification in BLS, ACLS, and PALS. This course allows for clinical application of principles of nurse anesthesia. Students are precepted in the perioperative clinical site. Experiences include application of skills specific to the role of nurse anesthetist. Important concepts include anatomical, physiological, pathophysiological and pharmacological principles.

NGR 6435L. Anesthesia Practicum V (10). (S/U grade only). Prerequisites: NGR 6434L, current medical malpractice coverage as a SRNA, a valid license as a registered nurse in the state of Florida, and certification in BLS, ACLS, and PALS. This course allows for clinical application of principles of nurse anesthesia. Students are precepted in the perioperative clinical site. Experiences include application of skills specific to the role of nurse anesthetist. Important concepts include anatomical, physiological, pathophysiological and pharmacological principles.

NGR 6436L. Anesthesia Practicum VI (10). (S/U grade only). Prerequisites: NGR 6435L, current medical malpractice coverage as a SRNA, a valid license as a registered nurse in the state of Florida, and certification in BLS, ACLS, and PALS. This course allows for clinical application of principles of nurse anesthesia. Students are precepted in the perioperative clinical site. Experiences include application of skills specific to the role of nurse anesthetist. Important concepts include anatomical, physiological, pathophysiological and pharmacological principles.

NGR 6437L. Anesthesia Practicum VII (10). (S/U grade only). Prerequisites: NGR 6436L, current medical malpractice coverage as a SRNA, a valid license as a registered nurse in the state of Florida, and certification in BLS, ACLS, and PALS. This course allows for clinical application of principles of nurse anesthesia. Students are precepted in the perioperative clinical site. Experiences include application of skills specific to the role of nurse anesthetist. Important concepts include anatomical, physiological, pathophysiological and pharmacological principles.

NGR 6460. Pharmacology of Anesthesia I (3). Prerequisites: Admission to the nurse anesthesia program and completion of an undergraduate pharmacology course. This course presents, analyzes/evaluates general principles of drug action, signs and stages of anesthesia, uptake and distribution of inhalation agents, and pharmacology of specific drug classes: inhalation agents, anesthesia induction drugs, opiate agonists/antagonists, and non-narcotic agents.

NGR 6461. Pharmacology of Anesthesia II (3). Prerequisite: NGR 6460. This course presents, analyzes/evaluates pharmacology of specific drug classes: neuromuscular blocking drugs, local anesthetics, autonomic drugs, and cardiovascular drugs.

NGR 6491. Nurse Anesthesia Practice Comprehensive I (1). Prerequisite: Successful standing in the nursing anesthesia program at the end of semester four. This course is designed to measure the knowledge base and clinical competency of the nurse anesthesia student.

NGR 6492. Professional Aspects of Nurse Anesthesia (3). Prerequisite: Satisfactory academic standing within the nurse anesthesia program after semesters one and two. This course analyzes and evaluates the nurse anesthesia profession in terms of professionalism, regulation, healthcare, environment, issues, politics, and practice challenges to include by not limited to adverse outcomes in anesthesia, cultural competency, conflict management, professional issues, legality, liability, informed consent, involvement in professional associations and addiction in anesthesia providers.

NGR 6495. Nurse Anesthesia Practice Comprehensive II (1). Prerequisite: Successful standing in the nurse anesthesia program at the end of semester five. This course is designed to measure the knowledge base and clinical competency of the nurse anesthesia student.

NGR 6496. Nurse Anesthesia Practice Comprehensive III (2). Prerequisite: Successful standing in the nurse anesthesia program at the end of semester six. This course is designed to measure the knowledge base and clinical competency of the nurse anesthesia student.

NGR 6803. Research and Evidence-Based Practice I (1). Prerequisite: Satisfactory academic standing within the nurse anesthesia program after semester three. This course prepares advanced practice nurse anesthetists who are proficient in ethical utilization and clinical application of research including problem identification and evaluation to provide high quality care and improve practice.

NGR 6809. Research and Evidence-Based Practice II (1). Prerequisite: NGR 6803. This course prepares advanced practice nurse anesthetists who are proficient in ethical utilization and clinical application of research including problem identification and evaluation to provide high quality care and improve practice.

NGR 6929Cr. Clinical Correlation Conference (1). Prerequisites: Admission to the nurse anesthesia program and successful completion of each Clinical Correlation Conference course in the series. This course provides the opportunity for analysis and evaluation of current anesthesia literature through student presentations and discussion and anesthesia related guest lectures. May be repeated to a maximum of five semester hours.

Graduate NURSING

COLLEGE OF NURSING

Website: <http://nursing.fsu.edu/>

Professors: Grubbs, Karioth, Lowe, McDougall, McFetridge-Durdle, Whyte, Wong; **Associate Professors:** Cormier, Millender, Park; **Assistant Professors:** Abbott, Bahorski, Bamber, Dickey, Graven, Martorella, Park, Porterfield; **Teaching Faculty III:** Greenhalgh, Kung, Tucker, Whyte; **Teaching Faculty II:** Barfield, Campbell, Craig-Rodriguez, Hayes, Kendall, Newlin, Scott-King, Shelton, Whitten, Winton; **Teaching Faculty I:** Brewer, Cuchens, Keane, Wheeler; **Assistant in Research:** Schluck

The College of Nursing graduate program offers the Doctor of Nursing Practice (DNP) degree which prepares students for advanced practice as a family nurse practitioner.

Advanced Practice Roles

Nurse Practitioners provide primary care to both healthy families and families experiencing crises and/or chronic health problems in ambulatory care, home health care, long-term care, or acute care settings. Courses in advanced health assessment, pharmacology, and pathophysiology are required. The curriculum is consistent with that defined by the Florida Board of Nursing requirements and regulated by Florida Statutes for Advanced Practice Registered Nurse (APRN). Students structure clinical experiences and electives to meet prerequisites for writing certification examinations as Family Nurse Practitioners (FNP).

For complete details of programs offered and admission requirements, plus a description of the college, its facilities, opportunities, and available financial assistance, refer to the "College of Nursing" chapter of this *Graduate Bulletin*.

Definition of Prefix

NGR—Nursing: Graduate

Graduate Courses

NGR 5003. Health Assessment for Advanced Practice (2). Prerequisites: NGR 5003L; admission to the DNP program. This course is designed to provide the learner with a strong foundation in the health assessment skills requisite for advanced nursing practice. The focus of the course is on history taking, physical examination skills, laboratory, diagnostic and radiographic modalities, and documentation for advanced assessment. The diagnostic reasoning process is developed as it relates to building a clinical database.

NGR 5003L. Health Assessment Laboratory for Nurse Practitioners (2). (S/U grade only.) Prerequisite: Admission to the DNP program. Corequisite: NGR 5003. This course is designed to provide the learner with a strong foundation in health assessment skills requisite for advanced nursing practice. The focus of course is on the diagnostic reasoning process as it relates to building a clinical database.

NGR 5056C. Advanced Psychiatric Assessment and Diagnostics (3). Prerequisite: Admission into the Psychiatric/Mental Health Nursing certificate program. This course provides students with a knowledge base in mental health assessment of clients across the life span within the context of the advanced psychiatric mental health nursing role. Emphasis is on the acquisition and analysis of relevant data for the development of a comprehensive and holistic mental health assessment and subsequent diagnosis. Focus is on history taking, analysis, data categories, and specific techniques used to identify mental health problems and differential diagnoses in clients across the life span.

NGR 5064C. Advanced Skills for the Advanced Practice Nurse (2). Prerequisite: NGR 5003 and NGR 5003L. This advanced skill course enables learners to develop skills for use in primary clinical practice. Students explore both the theoretical and practical aspects of a variety of procedures and diagnostic modalities including microscopy, suturing, EKG (basic and advanced), radiology, casting and splinting and dermatological procedures.

NGR 5102. Theoretical Constructs for Nursing Science (3). Prerequisite: Admission to the MSN or DNP program or instructor permission. This course is designed to assist the learner in analyzing and evaluating selected theories appropriate for advanced-practice nursing. Topics cover the relationship between theory, practice, and research; sources of theory for the discipline; contributions and philosophies of early nurse leaders and theorists, as well as those from other disciplines that are appropriate to health care; the development and evaluation of nursing knowledge and theory; as well as the analysis and application of theories and models in nursing practice, education, administration, and research.

NGR 5112C. Advanced Clinical Practice for Nurse Educators (4). Prerequisites: NGR 5003C, NGR 5140, and NGR 5172. This course is designed to facilitate the student's ability to identify and analyze new knowledge, trends, and issues pertinent to advances in healthcare and their impact on the advanced nursing practice of adult patients and families. In addition, the clinical experience focuses on the advanced practice nurse's role in the integration of new information and technologies into nursing practice through reflective and evidence-based practice that ensures optimal patient care and safety.

NGR 5140. Advanced Pathophysiological Concepts in Nursing Science (3). Prerequisite: Admission to the DNP Nursing Program. This course is designed to build on basic pathophysiology principles and explore the principles of normal body functions and pathophysiological changes that occur as a result of disease, lifestyle, and homeostatic changes in the body. The course explores altered pathophysiological health at the genetic, cellular and organ system level. The course examines epidemiology, pathophysiological processes and related systems, as well as disease processes across the life span. The course uses case studies to demonstrate the clinical assessment approaches for the advanced practice nursing student.

NGR 5172. Pharmacology for Advanced Practice (3). Prerequisite: Admission to the graduate program or instructor permission. This course provides a broad overview of pharmacology using a lifespan approach. Special consideration is given to professional and statutory issues related to prescribing. A broad overview of agents commonly used in primary care is provided, following a system-specific approach, with special attention paid to issues specific to the various stages of the lifespan. The course covers concepts of compliance and collaboration in the context of effecting positive changes for the patient. Emphasis is placed on facilitating pharmacologic management of patients for advanced practice nurses in independent and collaborative practice.

NGR 5503. Psychiatric-Mental Health Nurse Practitioner: Individual Psychotherapy (3). Corequisite: NGR 5503L. This course provides didactic experiences in the assessment, diagnosis, treatment, and evaluation of clients across the lifespan who are experiencing acute and/or chronic psychiatric disorders. Emphasis is placed on evidence-based practice and the utilization of theoretical and conceptual models for assessing, planning, and treating major psychiatric disorders. Moreover, emphasis is given to promoting, maintaining, and restoring wellness to individual clients of all ages. Holistic therapeutic approaches are used to enhance the functioning of diverse individuals across the lifespan.

NGR 5503L. Psychiatric-Mental Health Nurse Practitioner: Individual Psychotherapy Clinical Lab (3). Prerequisite: NGR 5503. This course provides clinical experiences in the assessment, diagnosis, treatment, and evaluation of clients across the lifespan who are experiencing acute and/or chronic psychiatric disorders. Emphasis is placed on evidenced-based practice and the utilization of theoretical and conceptual models for assessing, planning, and treating major psychiatric disorders. Moreover, emphasis is given to promoting, maintaining, and restoring wellness to individual clients of all ages. Holistic therapeutic approaches are used to enhance the functioning of diverse individuals across the lifespan.

NGR 5504L. Psychiatric/Mental Health Nursing Practicum (5). (S/U grade only.) Prerequisites: NGR 5056C, NGR 5538, NGR 5503, NGR 5503L, NGR 5508, and NGR 5508L. This course provides an opportunity to synthesize advanced knowledge and role behaviors in an advanced practice role within clinical specialty tracks. Student are under the supervision of faculty with agency preceptors in an appropriate facility or institution. With faculty guidance, students develop a practicum plan based on course objectives to include specific objectives, learning activities, and evaluation methods.

NGR 5508. Psy./Mental Health Ns. Practitioner II: Family & Group Psychotherapy (3). Prerequisites: NGR 5503, NGR 5503L, NGR 5056C, and NGR 5538. Corequisite: NGR 5508L. This course provides the PMHNP student with advanced knowledge in group psychotherapy techniques that are applicable across the lifespan. This course focuses on the theoretical and conceptual models of group dynamics and utilizes evidence-based practices in assessing, planning, treating, and evaluating dysfunctional patterns in groups. Additionally, this course promotes and maintains effective and therapeutic communication patterns in a variety of group settings.

NGR 5508L. Psy./Mental Health Ns. Pr II: Family & Group Psychotherapy Lab (3). Prerequisites: NGR 5056C and NGR 5538. Corequisite: NGR 5508. This course provides clinical experiences in the assessment, diagnosis, treatment, and evaluation of clients across the lifespan who are experiencing acute and/or chronic psychiatric disorders. Emphasis is placed on evidenced-based practice and the utilization of theoretical and conceptual models for assessing, planning, and treating major psychiatric disorders. Moreover, emphasis is given to promoting, maintaining, and restoring wellness to clients of all ages. Holistic therapeutic approaches are used to enhance the functioning of diverse individuals across the lifespan.

NGR 5538. Psychopharmacology for Advanced Practice Psychiatric Nursing (3). Prerequisite: NGR 5172. This course provides a review of common psychoactive medications, classes, uses, effects, side effects, and prescriptive implications related to nursing care of clients with psychiatric mental health illness, including children, adolescents, and adults. Content is presented in relation to the role of psychiatric mental health nurse who functions in an advanced role in a variety of settings. Emphasis is on the selection and use of psychoactive medications to help reduce emotional pain and increase personal autonomy of patients suffering from mental illness. An additional focus is to increase cultural competence by understanding the impact of psychoactive medications on the client, family, and community.

NGR 5638. Health Promotion and Program Planning (3). Prerequisite: Instructor permission. This course focuses on the development of concepts and skills for advanced risk assessment and the synthesis of knowledge and strategies to promote healthy lifestyles in client populations. Health promotion models and evidence-based strategies are used to design programs to address behavioral and social factors that contribute to mortality in diverse populations.

NGR 5714C. Instruction in Nursing Education: Design and Strategies (4). This course introduces the graduate nursing student to instructional design and strategies for both classroom and clinical instruction. Emphasis is placed on the relationship among learning theories, the population of interest to be educated, the learning environment, and the evidence-based instruction strategies. The course provides teaching opportunities in the classroom and in nursing-education laboratory settings.

NGR 5718C. Evaluation in Nursing Education (4). Prerequisites: NGR 5714C. This course is designed to introduce the graduate nursing student to theories and methods of evaluation in nursing education at the individual, course, and program level. Applications of testing and measurement relevant to the health professions are examined. Focus is placed on effective test design and test writing skills, other methods of evaluating performance in the classroom and clinical settings, and the analysis of evaluation tools for educational purposes. In addition, the student develops a personal philosophy of teaching/learning.

NGR 5766. Nursing Leadership within Complex Healthcare Environments (3). Prerequisite: NGR 6895. This course examines leadership theories within the context of organizational culture. Students analyze traditional and transformational leadership models and their effects on healthcare environments. Emphasis is placed on the role of the health politics in the workplace, organization, government, and community as well as on social policy, power, and political behaviors. The course also explores professional attributes and requisites for the next generation of advanced-practice nursing leaders within the evolving healthcare system.

NGR 5772L. Clinical Leadership Practicum I (3). (S/U grade only.) Prerequisites: NGR 5770. This course emphasizes the development of nursing leadership skills in managing health care microsystems and mesosystems. The course provides students with opportunities to integrate bioethical and legal dimensions into clinical leadership and management decisions making. Innovations in human resource management and patient care delivery systems are also emphasized.

NGR 5773L. Clinical Leadership Practicum II (3). (S/U grade only.) Prerequisites: NGR 5770 and NGR 5772L. This course continues student development of nursing leadership and decision-making skills in managing health care microsystems. Clinical guidelines and emergency preparedness strategies are examined.

NGR 5800. Methods in Nursing Research (3). Prerequisite: Admission to the graduate program of the College of Nursing or instructor permission. This course builds upon the knowledge of the research process learned at the baccalaureate level and focuses on the importance of empirical investigation in the development of nursing theory and the formulation of testable hypotheses in nursing practice. Emphasis is directed to the nurse as consumer and practitioner in the area of research and evidence-based practice.

NGR 5846. Biostatistics (3). Prerequisite: Admission to the graduate program or instructor permission. This course is designed to provide an understanding of fundamental statistical principles that can be applied to health-related problems in clinical and public health settings. Students interpret published statistical findings, select and apply statistical methods to health related research problems and critique statistical methods utilized in biomedical research. Only the most common methods of statistical analysis used in published nursing research are reviewed.

NGR 5871. Managing Information and Technology in Health System (3). Prerequisites: Admission to the graduate program or instructor permission. This course examines the critical elements and use of healthcare information systems and patient-care technology as applied to healthcare delivery, quality improvement, patient safety, and the evaluation of organizational outcomes. Topics cover health applications related to clinical, administrative, research, and educational decision making, with emphasis on the exploration of issues and trends related to human-technology interface, implementation science, ethics, and cultural diversity.

NGR 5887. Legal and Ethical Complexities in Healthcare (3). Prerequisite: Admission to the DNP program or instructor permission. This course focuses on legal and ethical issues confronting healthcare professionals and practitioners. The course applies ethical theories to interprofessional team resolution of these dilemmas, while placing emphasis on the use of decision-making models. Topics cover ethical and legal considerations, patient-provider relationships, and moral-judgment concepts.

NGR 5891. Healthcare Policy for Nurse Leaders (3). Prerequisite: Admission to the MNS program or instructor permission. This course offers the nurse leader/manager students an opportunity to analyze the impact of politics on healthcare policies that affect healthcare delivery systems. Legal and ethical considerations of healthcare policies are examined in the context of providing quality and cost effective services. The leadership role of nurses in designing strategies for influencing healthcare policy development to promote optimal healthcare outcomes and quality care is explored.

NGR 5894. Global Health (1-2). Pre- and corequisites: NGR 5003 and NGR 5003L. This online course is designed to provide an in-depth understanding and appreciation of the broad field of global (or international) health. The student will have the opportunity to tailor the experience to their own interest that may include an overview of the health situation in a given country and/or specific conditions such as nutrition, mother-child health, communicable disease, etc. This elective course should be considered in one of the following situations: 1) as a stand-alone course with a broad interest in global health (1 SH); and 2) as an international experience with FSU COM and/or CON faculty in Nicaragua (2 SH).

NGR 5905r. Directed Independent Study (1-3). Prerequisite: Instructor permission. Directed independent study relevant to an area of specialized nursing practice. May be repeated to a maximum of five semester hours.

NGR 5930r. Special Topics in Nursing (1-3). This course consists of seminar topics that may include advanced technique in critical care nursing, emphasis on special populations, emphasis on specific identified nursing phenomena.

NGR 5933L. Special Topics Lab (2). (S/U grade only.) This course is the final in a series of three practicum courses continuing student development of nursing leadership and decision-making skills in managing health care microsystems. Special emphasis is placed on honing the skills of nurse leaders in planning and integrating evidence-based practice into patient care delivery systems to improve health care outcomes.

NGR 5941Lr. Supervised Teaching Laboratory (1–5). Prerequisite: Instructor permission. This course is designed to run concurrently with the courses in the nurse educator sequence. The primary purpose is to afford students the opportunity to put into practice theories, concepts and principles of the teaching-learning process while functioning as a teaching assistant. Under supervision, students design, implement and evaluate teaching episodes for delivery to individuals and groups of nursing students, health care personnel, clients and their families. May be repeated to a maximum of five semester hours will count toward degree.

NGR 6185. Genetics and Emerging Diseases (3). Prerequisites: NGR 5140. This course is designed to facilitate the nursing student's understanding of the impact of genetics and emerging disease on the professional-nursing practice. Topics include basic concepts of genetics and emerging diseases, their application to nursing practice and global health, as well as related ethical, legal, and social issues.

NGR 6194. Orthopedics for Advance Practice Nursing (3). Prerequisite: Admission to the DNP-FNP program. This course provides a comprehensive overview of the diagnosis and management of musculoskeletal disorders for patients across the lifespan. The integration of physical examination techniques specific to selected problems, the ordering and interpretation of radiologic tests, and the initiation of advanced treatments specific to musculoskeletal conditions are discussed.

NGR 6304. Issues in Pediatrics for Advanced Practice Nursing (3). Prerequisite: Admission to the DNP-FNP Program. This course provides a comprehensive overview of pediatric practice in the context of Family Nurse Practitioner Competencies. Emphasis is on the following areas: pediatric review, growth and development, pediatric theorists, role of the nurse practitioner, pediatric health assessment and physical exam, and diagnosis and management of common illness in children and adolescents.

NGR 6348. Women's Health Care for Family Advanced Practice Nurses (3). This course addresses women's health care across the lifespan. It facilitates the family advanced practice nurse's understanding of how to provide primary care, reproductive care, and problem-based care unique for women. The focus is on clinical decision-making, progressing from the reason women seek care, through assessment, diagnosis, screening and diagnostic testing, management plans, and patient teaching.

NGR 6506. Mental Health Care Coordination in Primary Care (3). Prerequisite: Admission to the DNP Program. This course is designed to prepare students to effectively coordinate mental health care of clients in primary care, DNP's must be knowledgeable about various treatment modalities; their availability, cost and effectiveness. This elective seminar explores treatment modalities that may be appropriate for clients who present in primary care settings, with mental health concerns.

NGR 6601. Advanced Management of the Family I (3). Prerequisites: NGR 5003C and DNP core courses. Corequisite: NGR 6601L. This course is the second course focusing on the nurse practitioner role. It is designed to provide learners with the knowledge and skills to develop basic strategies designed to promote health, diagnose and manage basic acute and chronic health problems across the life span. The focus of the course is the development of sound diagnostic skill through an emphasis on the differential diagnostic process and institution of clinical strategies to address common acute and chronic disorders. The course provides a foundation for the development of the student's approach to the nurse practitioner role as they progress through the program.

NGR 6601L. Family Nurse Practitioner Practicum I (4). (S/U grade only). Prerequisites: NGR 5003C and DNP core courses. Corequisite: NGR 6601. This course applies the knowledge and skills gained in NGR 5003C and to develop basic strategies to promote health, diagnose, and manage basic acute and chronic health problems across the life span. Emphasis is on the development of sound diagnostic skills utilizing differential diagnostic during clinical patient visits. Students also begin to develop collaborative partnerships with the clinical preceptor and other healthcare professionals in the management of patients.

NGR 6602. Advanced Management of the Family II (3). Prerequisites: NGR 6601 and NGR 6601L. Corequisite: NGR 6602L. This course examines and refines methods of diagnosis and management of health problems that affect the individual and family. Topics cover the prevention of illness, promotion of wellness, the management of complex acute and chronic health problems and their impact on communities, as well as the role of the advanced practice nurse as a vital force in contemporary health care.

NGR 6602L. Family Nurse Practitioner Practicum II (4). (S/U grade only). Prerequisites: NGR 6601 and NGR 6601L. Corequisite: NGR 6602L. This course is designed to provide students with advanced knowledge and skills related to the clinical management of actual and potential health problems across the lifespan in primary care. Emphasis is on promoting health, preventing illness, and managing complex acute and chronic illnesses. The course also explores the role dimensions of manager, collaborator, and teacher within the context of the role of the family nurse practitioner.

NGR 6619L. Family Nurse Practitioner Practicum III (5). (S/U grade only). Prerequisites: NGR 6601, NGR 6601L, NGR 6602, and NGR 6602L. This course is designed for students to synthesize the advanced-practice knowledge, skills, and abilities into the role of advanced-practice nursing leader prior to residency. Students complete their transition to the role of nurse practitioner with the assistance of a physician, nurse practitioner, or physician assistant. In collaboration with faculty, students will select a practice setting that reflects their individual interests and completes their advanced-practice preparation.

NGR 6674. Population Health and Applied Epidemiology (3). Prerequisite: Admission to the graduate Nursing program or instructor permission. This course provides a foundation population health and applied epidemiology. The emphasis is on analysis of epidemiologic and scientific data for the assessment and evaluation of population health.

NGR 6768. DNP Roles and Interprofessional Collaboration (3). Prerequisite: Admission to the DNP program. This course offers students the opportunity to examine DNP roles and responsibilities that lead to effective practice and interprofessional collaboration. The course utilizes theoretical concepts related to the role theory and models of interprofessional collaboration as a basis of analysis of individual, unit-based, and organizational communication and work strategies that promote quality and culturally competent care.

NGR 6853. Translation and Synthesis of Evidence (3). Prerequisites: NGR 5800 and NGR 5846. This course provides tools for locating, evaluating, refining, synthesizing, channeling, applying, and explaining appropriate research findings, in order to improve the efficiency and effectiveness of nursing care in interprofessional settings. Quality-improvement methods and grant writing are discussed.

NGR 6893. Healthcare Finances, Economics, and Entrepreneurship (3). Prerequisite: NGR 5887. This course examines changes in healthcare systems based on evolving healthcare priorities and economic outcomes. Students analyze the relationship among processes, outcomes, and economic indicators; explore financial models of healthcare delivery, including resource management, distribution of services, cost-benefit analyses, return on investments, and outcome-based care; investigate financing of the practice of care-delivery systems viewed on a continuum of individual practitioner-care delivery to acute and complex, multi-level organization systems; and examine key entrepreneurial leadership principles, practices, and creative strategic planning for healthcare ventures.

NGR 6895. Healthcare Policy, Politics, and Power (3). Prerequisite: Admission to the DNP program or instructor permission. This course analyzes the impact of politics and power on healthcare policies that affect healthcare delivery systems and advanced-nursing practice. Topics cover legal and ethical considerations of healthcare policies in the context of providing quality and cost-effective services, as well as the leadership role of advanced-practice nurses in designing strategies for influencing healthcare-policy development to promote optimal healthcare outcomes and quality care.

NGR 6897L. Health Systems Leadership Practicum III (5). (S/U grade only). Prerequisites: NGR 6778L and NGR 6779L. This course involves supervised practice at the policy level, designed to advance nursing practice and strengthen leadership across healthcare organizations and agencies. Students identify and interact with key state or national stakeholders in order to design and advance a complex healthcare policy issue. Emphasis is on gathering, analyzing, designing, and communicating actionable information. In their role of policy activists, students need to demonstrate expertise by adopting clinical judgment, systems thinking, accountability, and quality outcomes, and by leading a focused systems change, policy development, grant proposal, or presentation at a national meeting.

NGR 6899. Transforming Health Care Delivery (3). Prerequisites: NGR 6853 and NGR 6896. This course synthesizes approaches to transforming the delivery of health care from various disciplines including organizational, human factors, political, and economic science. The purpose of the course is to facilitate the student's ability to integrate a broad application of these disciplines in facilitating beneficial outcomes within health care organizations. Students are challenged to analyze problems at the organizational and systems level and develop effective evidence based solutions. Advanced levels of clinical judgment, systems thinking, and accountability in designing and evaluating care delivery models and strategies are emphasized.

NGR 6910C. DNP Project III: Implementation and Data Analysis (1). (S/U grade only). Prerequisites: NGR 6931C and NGR 6935C. This course is the third of four DNP Project courses. The course provides students with the opportunity to implement and evaluate the DNP Project under the guidance of the Major Professor. This includes collecting and analyzing relevant data and beginning to synthesize the results and discussion sections of the DNP Project Report.

NGR 6912C. DNP Project IV: Dissemination (1). (S/U grade only). Prerequisite: NGR 6910C, NGR 6931C, and NGR 6935C. This course is the fourth of the four DNP Project courses. During this course, students prepares the final DNP Project Report for submission and disseminates the project outcomes. A poster presentation is prepared and presented at the DNP Exposition and to the clinical agency.

NGR 6931. Project I, Proposal Development (1). (S/U grade only). Prerequisite: NGR 6853. This course is the first of four DNP Project courses (DNP Project I - IV). Students explore the components of the DNP project proposal while focusing heavily on preparing the clinical question, aims/objectives, defined methodology, use of appropriate statistical test, use of theoretical underpinning, and completion of the DNP Project proposal. The proposal is used in the DNP Project II to complete the Institution Review Board Human Subjects Committee application.

NGR 6935C. DNP Project II: IRB Protection of Human Subjects (1). (S/U grade only). Prerequisite: NGR 6931. This course is the second of the four DNP project courses. The course provides students with the opportunity to finalize the DNP Project Implementation Plan and submit the IRB Protection of Human Subjects application to FSU and the clinical site, if required. The course uses a structured seminar format to facilitate dialogue with course faculty, students, and the student's DNP Major Professor.

NGR 6942L. DNP Practicum IV (1–5). (S/U grade only). Prerequisite: All DNP core and specialty courses. This course provides an intensive clinical practice experience that is intended to demonstrate the culmination of the students' advanced practice role. Each student is required to submit individual objectives at the beginning of the semester and clinical experiences are individually designed around the focus of each student's program. With the guidance of faculty of an advanced-practice expert, students use scientific theory, systematic evidence appraisal, organizational and policy analysis, as well as models of care delivery. May be repeated to a maximum of five semester hours.

NGR 6943L. DNP Practicum V (1-5). (S/U grade only). Prerequisite: All DNP core and specialty courses. This course provides an intensive clinical-residence experience for students seeking additional clinical hours to meet certification-examination requirements or to demonstrate the culmination of their advanced practice role. Each student is required to submit individual goals at the beginning of the semester and clinical experiences are individually designed around the focus of each student's program. The clinical-residency experience will be facilitated by an advanced-practice expert. May be repeated to a maximum of five semester hours.

NGR 7769. DNP Roles and Leadership within Complex Healthcare Environments (3). Prerequisite: Admission to the DNP Program. This course examines roles and responsibilities of the DNP prepared nurse that lead to effective practice, leadership and interprofessional collaboration. Students analyze traditional and transformational leadership models and their effects on healthcare environments. Professional attributes and requisites for the next generation of advanced practice nursing leaders within the evolving healthcare system are explored.

Graduate Department of NUTRITION, FOOD AND EXERCISE SCIENCES

COLLEGE OF HUMAN SCIENCES

Website: <https://humansciences.fsu.edu/nutrition-food-exercise-sciences/>

Chair and Professor: Ray; **Professors:** Arjmandi, Delp, Hickner, Kim, Panton; **Associate Professors:** Ormsbee, Rao, Salazar; **Assistant Professors:** Berryman, Gordon, Hennigar, Hwang, Koutakis, La Favor, Parvativar, Singh, Steiner; **Dietetic Internship Director:** Trone; **DPD Director:** Farrell; **Program Director, Institute of Sports Sciences and Medicine:** Ray; **Teaching Faculty III:** Farrell, Garber, Sehgal; **Teaching Faculty I:** Ghosh, Griffiths, Maier, Williams; **Courtesy Faculty:** Burkhart, Daggy, Florian; **Professors Emeriti:** Dorsey, Harris, Haymes, Hsieh, Toole

The Department of Nutrition, Food and Exercise Sciences is in a unique position nationwide to provide graduate coursework and research opportunities in human nutrition and food science, as well as in exercise physiology and sports sciences. The combination of these respective areas of concentration within a single department facilitates integrative studies between diet and physical activity in the maintenance of health and the prevention or treatment of chronic diseases, as well as studies on the quality and safety of food.

Two master's programs are offered in the department: 1) Food and Nutrition and 2) Exercise Physiology with majors in exercise physiology, sports nutrition, and sports sciences. Thesis and non-thesis options are available for the master's programs.

The department also has a coordinated dietetic internship (DI) program which, in conjunction with the master's degree in Nutrition and Food Science or major in Sports Nutrition, provides a post-baccalaureate route for select students to become eligible to take the Registration Examination for dietitians. Students applying for the internship program must have completed the Didactic Program in Dietetics (DPD) requirements.

The department has two programs leading to a Doctor of Philosophy (PhD): 1) Human Sciences with a major in nutrition and food science; and 2) Exercise Physiology. These doctoral programs are designed to enable students to achieve competency in a specialized area of human nutrition, food science, or exercise physiology and to become independent researchers with a career in academia, industry, government, or other health-related fields.

Ongoing research in the department includes basic, clinical, and applied studies linking exercise, nutrition, food, and lifestyle modifications to human health. Examples include:

1. Obesity and other metabolic disturbances utilizing *in vitro*, *in vivo*, and clinical models
2. Age-associated investigations in areas of osteoporosis, sarcopenia, osteoarthritis, atherosclerosis, cancer, hypertension, and diabetes
3. Nutrition education and lifestyle modification interventions
4. Food science-related lines of research, e.g., food safety, food allergy, and food quality
5. Functional foods in health and disease
6. Sports sciences and medicine including injury prevention, treatment, and athletic performance enhancement

The department houses the Center for Advancing Exercise and Nutrition Research on Aging (CAENRA). This Center addresses major issues affecting the aging population in an attempt to uncover some of the underlying mechanisms of aging and to discover alternative/adjunctive approaches to halt the progression of chronic diseases and/or improve their health.

Research Facilities

Our facility has two dual x-ray absorptiometry (DXA) units used for our bone mineral density (BMD) and body composition studies; an electrocardiography machine (ECG) for heart rhythms; and multiple-metabolic carts to assess maximal oxygen consumption, metabolic rate, and respiratory exchange ratio. The department also has a fluorescent microscope, high-speed refrigerated centrifuge, texture analyzer, and a micro-computed tomography 3D scanner (micro-CT) for bone analysis.

The **Applied Electrophysiology Exercise Laboratories** investigate the underlying mechanisms that affect cardiac and arterial smooth muscle physiology under normal and pathological conditions using animal models. Techniques include PCR, Western blotting, surface biotinylation, calcium imaging, electrocardiogram, and pressurized artery myography.

The **Cardiovascular Laboratories** are equipped with a Finometer beat-to-beat blood pressure and a hemodynamic monitoring system; Sphygmocor for pulse wave velocity, aortic blood pressure, and augmentation index (arterial stiffness); Hoklanson Plethysmography System to non-invasively measure both limb arterial and venous blood flow; Biopac MP100 Data Collection System with ECG and hand grip attachments; impedance cardiography for

stroke volume and cardiac output; WinCPRS software to estimate power spectrum density of heart rate/blood pressure variability and spontaneous baroreflex sensitivity; Electronic tilt table to evaluate cardiovascular responses to orthostatic stress; and ambulatory blood-pressure monitors.

Exercise Physiology Laboratories are for studying human performance, exercise metabolism, and cardiovascular and muscle physiology. The two Exercise Physiology Laboratories are equipped for teaching and research related to the human response to exercise. These laboratories contain metabolic carts for the indirect calorimetry measures of oxygen consumption, blood lactate and blood gas analyzers, an environmental chamber, and DXA units in addition to various equipment for biochemical assessments.

There is a resistance training area equipped with MedX™ machines focusing on all major muscle groups. Resistance machines include back extension, row, chest press, leg extension, leg curls, leg press, triceps pushdown, biceps curl, overhead press, and abdominal crunch. There is also a Biodex™ dynamometer for testing and training. For those research studies utilizing aerobic exercise as means for intervention, the exercise laboratory also has several cycle ergometers and treadmills, as well as Wingate cycle ergometers that can be used for anaerobic testing. There are also two whole body vibration Powerplate machines.

The **Institute of Sports Sciences and Medicine (ISSM)** houses a state-of-the-art Human Performance Laboratory designed for testing competitive athletes of all ages and clinical populations. The Institute collaborates regularly with the College of Medicine and the Athletics Department. The laboratory provides an opportunity for investigators to conduct multidisciplinary research in human and athletic performance (including prevention and treatment of athletic injuries), sports and performance nutrition, body composition, metabolism, and general health. The ISSM contains a DXA and a BodPod for body composition analyses, zero-gravity treadmill, oversized treadmill, cycle ergometers, force plates, tendo unit, bioelectrical impedance spectroscopy, and a Biodex™ dynamometer as well as clinical and biochemistry lab space containing YSI 2800 Clinical Analyzer and Microdialysis CMA 600 Analyzer.

Muscle Research Laboratories are equipped to study the functional, molecular and cellular adaptations of skeletal muscle to various stimuli and environments such as exercise, nutrition, aging, and muscle wasting diseases or conditions in humans and animals. Techniques include *in-situ* and *in-vivo* muscle function in rodents, RT-PCR, Western blotting, immunohistochemistry, and other biochemistry lab techniques.

The **Nutrition and Food Science Laboratories** are equipped with spectrophotometers, various electrophoresis systems, automated microplate reader and washer, freeze dryers, chromatographic systems, micro DSC, immunochemistry equipment, and food-analysis equipment. Faculty and students also have access to a cell culture facility for *in vitro* experiments and molecular imaging for protein and mRNA visualization. Furthermore, our department and the National High Magnetic Field Laboratory collaborate, giving us access to advanced magnetic-resonance imaging techniques.

Scholarships and Fellowships

In addition to graduate teaching and research assistantships, students have the opportunity to apply for several departmental scholarships including: scholarships for international students, minority students, students with demonstrated financial need, and students engaged in research and teaching. These scholarships are awarded annually. Graduate students also have the opportunity to apply for scholarships/fellowships at both the College and the University levels.

Master of Science (MS) in Nutrition and Food Science

Areas of specialization include:

1. Food science (+DI option)
2. Nutrition science (+DI option)

Thesis and non-thesis programs are available for the Food and Nutrition program (32 semester hours for specialization in nutrition science; 33 semester hours for specialization in food science; and 47 semester hours with DI option). In addition to meeting University admission requirements, admission to the nutrition and food science graduate programs requires an upper-division GPA of 3.0 and a recommended minimum Graduate Record Examination (GRE) scores of 150 on the Quantitative Reasoning section, 150 on the Verbal Reasoning section, and 4.0 on the Writing section. Students are expected to have a background of courses in food and nutrition, general and organic chemistry, elementary biochemistry, metabolism, microbiology, and anatomy/physiology.

For the combined dietetic internship, students must first be admitted to a qualifying master's program. In addition, the individual must submit verification that the Didactic Program in Dietetics (DPD) requirements for the

Academy of Nutrition and Dietetics have been met. A selection committee makes the final recommendation for acceptance into the combined dietetic internship program. The student accepted into the combined dietetic internship will also need to successfully complete eighteen credit hours of HUN 8945 over the course of the program (1200 hours of practical experience).

Core courses required for the specialization in nutrition science are: HUN 5242, HUN 5243, HUN 5802 and HUN 5802L, and FOS5930 or HUN 5930. For the thesis option, the student must also take HUN 5971 (six semester hours) and HUN 8976 (zero semester hours). For the non-thesis option, the student must take HUN 5906 (three semester hours) and HUN 8966 (zero semester hours).

Core courses required for the specialization in food science are: FOS 5205, FOS 5936, FOS 5930 Food Microbiology, and HUN 5802 and HUN 5802L. For the thesis option, the student must also take HUN 5971 (six semester hours) and HUN 8976 (zero semester hours). For the non-thesis option, the student must take six semester hours from suggested departmental or outside elective courses and HUN 8966 (zero semester hours).

Master of Science (MS) in Exercise Physiology

Students pursuing an MS in Exercise Physiology may major in exercise physiology, sports nutrition, or sports sciences.

Both thesis and non-thesis programs are offered for majors in exercise physiology and sports nutrition; sports sciences is a non-thesis program. Admission to the exercise physiology program, regardless of major, requires an upper-division GPA of 3.0 and recommends minimum GRE scores of 150 on the Quantitative Reasoning section, 150 on the Verbal Reasoning section, and 4.0 on the Writing section. Students are expected to have background supporting courses in human nutrition, general chemistry, anatomy/physiology, and exercise physiology.

Core courses required for a major in exercise physiology are: HUN 5802 and HUN5802L (or CHD 5915), APK 5111C, PET 5367, PET 5553, PET 5930. For the thesis option, the student must also take HUN 5971 (six semester hours) and HUN 8976 (zero semester hours). For the non-thesis option, the remaining requirements include APK 8945 (nine semester hours) and HUN 8966 (zero semester hours).

Core courses required for a major in sports nutrition include: HUN 5802 and HUN5802L (or CHD 5915), APK 5111C, PET 5367, PET 5553, PET 5930, HUN 5242, HUN 5243 and Nutrition Counseling. For the thesis option, students must also take HUN 5971 (six semester hours) and HUN 8976 (zero semester hours). For the non-thesis option, students must also take HUN 5906 or APK 8945 (six semester hours), and HUN8966 (zero semester hours).

Courses required for a major in sports sciences (non-thesis only) include: APK 5111C, PET 5367, PET 5930, PET 5412, PET 5389, FAD 5700 PET 5751 PET 6931r (Adv Topics: Strength and Power Training; Adv Topics: Special Topics in Sport Sciences), PET 5945, and HUN 8966.

Exercise Physiology Combined Bachelor's/Master's Pathway: Available to current FSU Exercise Physiology undergraduate students who have completed 90 credit hours (transfer students should have completed 24 credit hours at FSU) and the appropriate prerequisites for PET4551. Students must also have a minimum upper-division GPA of 3.00 and GRE minimum scores of 150 Verbal, 150 Quantitative, and 3.5 Writing. Eleven (11) graduate credit hours will count toward both the BS and MS degree requirements. The following courses are taken during the last semester (spring only) of the undergraduate degree: PET5553, PET5077, and PET5930 and a course on medical terminology (HUN 5938).

Doctor of Philosophy (PhD) Programs

The Department of Nutrition, Food and Exercise Sciences offers two doctoral degrees. The Doctor of Philosophy (PhD) in Human Sciences includes food science and nutrition science as areas of concentration and the Doctor of Philosophy (PhD) in Exercise Physiology.

In addition to meeting the University's requirements for graduate admission, admission to all doctoral programs requires an upper-division GPA of 3.0 and recommends minimum GRE scores of 150 on the Quantitative Reasoning section, 150 on the Verbal Reasoning section, and a 4.0 on the Writing section. A curriculum vitae, three letters of recommendation, and a letter of intent describing research interests are also required. It is requested that doctoral students participate in a departmental interview.

The PhD program in Human Sciences with areas of emphasis in nutrition or food sciences is a competency-based research degree. This degree requires fifty-seven semester hours minimum and the student must advance to mastery in the field of specialization. The committee member from the area of emphasis should be consulted by the student in selecting these courses. All courses are subject to approval by the student's committee. Specific course requirements for all doctoral students with a concentration in food science

or nutrition science are: FOS/HUN 6930 (must enroll one semester hour for three semesters), HOE 6366, HUN 6911 (three semester hours), electives, and statistics (four semester hours minimum).

Core courses required for Ph.D. in Human Sciences with emphasis in nutrition science are: HOE 6366, HUN 6911, FOS 6930 or HUN 6930, HUN 8964 (zero semester hours), HUN 6980 (24 semester hours), and HUN 8985 (zero semester hours). HUN 5242, HUN 5243 and Cell and Molecular Biology are also considered core for students not exposed to the content in their master's degree.

Core courses required for Ph.D. in Human Sciences with emphasis in food science are: FOS 6351C, FOS 6930, HOE 6366, HUN 6911, HUN 8964 (zero semester hours), HUN 6980 (24 semester hours), and HUN 8985 (zero semester hours). FOS5205, FOS 5936, and Food Microbiology are also considered core for students not exposed to the content in their master's degree.

Core courses required for Ph.D. in Exercise Physiology are: Advanced Hum Physiology, HOE 6366, HUN 6911, PET 6930, Cell and Molecular Biology, HUN 8964 (zero semester hours), HUN 6980 (24 semester hours), and HUN 8985 (zero semester hours).

All doctoral students should have at least one manuscript submitted for publication prior to their dissertation defense.

Definition of Prefixes

APK—Applied Kinesiology

DIE—Dietetics

FOS—Food Science

FSS—Food Service Systems

HSC—Health Sciences

HUN—Human Nutrition

PET—Physical Education Theory

Graduate Courses

APK 5111C. Advanced Exercise Physiology (3). This course studies the physiological effects of acute and chronic physical exercise.

APK 8945r. Exercise Physiology Internship (1–9). (S/U grade only). Prerequisites: APK 5111C, PET 5553, and instructor permission. This course consists of supervised field experience in applied exercise physiology with emphasis on corporate and adult fitness, cardiac rehabilitation, or hospital-based wellness programs. May be repeated to a maximum of nine semester hours.

DIE 5248. Advanced Medical Nutrition Therapy (3). Corequisites: Admitted to Dietetics Internship Program (needs Internship Director's permission to enroll). This course offers a presentation and discussion of current topics in the field of dietetics and health care, including discussion of novel concepts and applications in dietetics. Methods in nutritional assessment are reviewed. Also, core competencies expected of entry-level dietitians are reviewed and completed.

DIE 5935. Current Topics in Dietetics (3). (S/U grade only). Prerequisite: DIE 5248. Corequisite: Admission to dietetics internship program. (Requires Internship Director's permission to enroll.) This course offers a presentation and discussion of current topics in the field of dietetics and health care; dissemination and discussion of novel concepts and application in the practice of dietetics; review of methods in nutritional assessment; and review and completion of core competencies expected of entry-level dietitians.

FOS 5205. Food Safety and Quality (3). Prerequisites: HUN 1201, FOS 3026, or departmental approval. The course covers topics such as food spoilage, food poisoning, food-borne pathogens, food laws and regulations, as well as HACCP and risk management. Emphasis is placed on current issues related to the safety and quality of food.

FOS 5424. Food Preservation (3). Prerequisites: Biochemistry and microbiology. Fundamental considerations in the preservation of foods by freezing, canning, dehydration, ionizing radiations, etc.

FOS 5930r. Seminar in Food and Nutrition Science (1). This course consists of student and faculty presentations on research and developments in food science and nutrition. May be repeated to a maximum of four semester hours.

FOS 5936. Selected Topics in Food Science and Technology (3). Prerequisites: FOS 4114; biochemistry. Investigation of current research related to selected topics in food science and technology.

FOS 6351C. Physical and Chemical Techniques in Food and Nutrition (3). Prerequisite: HUN 5802L; analytical chemistry recommended. Experimental approach to food and nutrition research may involve the study of foods, humans, or animal models and a variety of specialized instruments.

FOS 6930r. Seminar in Food and Nutrition Science (1). Doctoral student presentations concerning research in the food sciences. May be repeated to a maximum of four semester hours.

HSC 5603. Models of Health Behavior (3). Psycho-social and environmental factors influencing various health behavior patterns are presented.

HUN 5242. Carbohydrates, Fats, and Proteins (3). Prerequisite: Biochemistry or HUN 3224. Metabolism, physiological action, and interrelationships of carbohydrates, proteins, and lipids.

HUN 5243. Vitamins and Minerals (3). Prerequisite: Biochemistry or HUN 3225. Biochemical functions, physiological actions, and metabolism of the vitamins and minerals. Fundamental concepts underlying human nutrition.

HUN 5297. Eating Disorders, Body Image, and Healthy Weight Maintenance (3). This course presents current science-based information about nutrition, dieting, eating disorders, and body image.

HUN 5802. Research Design and Methodology (2). Basic research terminology, principles and techniques in movement science, nutrition and food science including library materials and writing techniques.

HUN 5802L. Research Design and Methodology Laboratory (1). Prerequisite: Chemistry. Laboratory techniques in the areas of physiology, biochemistry as related to nutrition and metabolism, exercise physiology, and food science.

HUN 5906r. Directed Individual Study (1–9). (S/U grade only). May be repeated to a maximum of nine semester hours.

HUN 5910r. Supervised Research (1–3). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

HUN 5930r. Food and Nutrition Seminar (1–4). Doctoral student presentations concerning research in the nutritional sciences. May be repeated to a maximum of four semester hours.

HUN 5938r. Special Topics in Nutrition (3). This course involves readings and discussion in special areas such as nutrition in aging, energy metabolism and obesity, and world food problems.

HUN 5971r. Thesis (3–6). (S/U grade only). A minimum of six semester hours is required.

HUN 6248r. Advances in Nutrition and Food Science (3–12). Prerequisites: HUN 5242, HUN 5243, and FOS 5936. Current topics in proteins, carbohydrates, lipids, minerals, or vitamins. May be repeated to a maximum of twelve semester hours.

HUN 6906r. Directed Individual Study (1–9). (S/U grade only). May be repeated to a maximum of nine semester hours.

HUN 6911r. Supervised Research (3–5). (S/U grade only). May be repeated to a maximum of five semester hours.

HUN 6930r. Food and Nutrition Seminar (1). Doctoral student presentations concerning research in the nutritional sciences.

HUN 6940r. Supervised Teaching (1–3). (S/U grade only). May be repeated to a maximum of three semester hours.

HUN 6980r. Dissertation (2–12). (S/U grade only). May be repeated to a maximum of twenty-four semester hours.

HUN 8945r. Supervised Field Experience (1–12). (S/U grade only). Prerequisite: Instructor permission, DIE 5248, HUN 5242, and HUN 5243. Supervised experience in applied dietetics. May be repeated to a maximum of twenty-four semester hours in a two-year period to meet CADE requirements for the dietetics internship.

HUN 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

HUN 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

HUN 8976r. Master's Thesis Defense (0). (P/F grade only.)

HUN 8985r. Dissertation Defense Examination (0). (P/F grade only.)

PET 5077. Physical Dimensions of Aging (4). The course deals with the quality of life, individual differences as we age, physical decline of physiological systems (cardiovascular, muscular, joints, bone, neuromuscular), health, exercise, and well-being, and the pathology of aging. Course assists students in developing an understanding of the physical aspects of aging to apply to setting such as physical therapy, sports medicine, and health and fitness programs in hospitals and retirement communities.

PET 5367. Nutrition and Exercise Performance (3). Immediate and long term effects of nutrition on exercise performance. Effects of acute and chronic exercise on nutrient requirements.

PET 5389. Strength Program Development for Competitive Athletes and Sport (3). Prerequisite: Admitted to the Sports Sciences Major of the MS in Exercise Science or instructor permission. This course explores the scientific basis and development of sports related fitness. Emphasis on muscle strength, endurance, speed, power, agility, and flexibility in competitive athletes. Various styles of programming and the methods used to elicit specific adaptations are emphasized. This course meets specific guidelines and competencies for strength and conditioning professionals.

PET 5412. Professional Practices for the Sports Scientist (3). Prerequisite: Admitted to the Sports Sciences Major of the MS in Exercise Science. This course explores fundamentals of sports sciences organizational, administrative, and management practices. Topics include facility organization, risk management, professional ethics, budgeting, staffing, personal advancement, and career development. This course meets specific guidelines and competencies for strength and conditioning professionals.

PET 5553. Cardiorespiratory and Anthropometric Evaluation and Development of Exercise Programs (3). Prerequisite: APK 5111C. This course is designed to examine techniques of cardiovascular, respiratory, and anthropometrical evaluation with a particular emphasis on aerobic capacity and body composition and to design, implement, and administer exercise programs for developing physical fitness.

PET 5653. Cardiovascular Program Development for Competitive Athletes and Sport (3). Prerequisite: Admitted to the Sports Sciences Major of the MS in Exercise Science or instructor permission. This course is a concentrated study of the assessment, evaluation, and design of cardiovascular program development for the competitive athlete including those with selected medical conditions or concerns. This course meets specific guidelines and competencies for strength and conditioning professionals.

PET 5751. Sports Fitness Testing and Evaluation for Competitive Athletes and Sport (3). Prerequisite: Admitted to the Sports Sciences Major of the MS in Exercise Science or instructor permission. This course includes development of knowledge, skills, and abilities in selecting, administering, and evaluating sports related fitness tests for competitive athletes. This course meets specific guidelines and competencies for strength and conditioning professionals.

PET 5930r. Seminar in Movement Sciences (1). Involves a number of student and faculty presentations concerning research and developments in exercise physiology, motor learning/control, and the movement sciences. May be repeated to a maximum of four semester hours.

PET 5945r. Sports Sciences Practicum (3). Prerequisite: Admitted to the Sports Sciences Major of the Master of Science Degree in Exercise Science. This course is comprised of supervised practicum experiences in a sports science setting. Emphasis is on developing skills and abilities of a strength and conditioning specialist through practical application of knowledge from previous or current coursework, while learning new related principles or concepts. May be repeated to a maximum of fifteen semester hours.

PET 6317. Skeletal Muscle Structure and Function (4). Prerequisite: APK 3110C or equivalent level of exercise physiology course. This course covers the study of the morphology and physiology of skeletal muscle which includes adaptations that occur in response to physical activity, disuse and aging.

PET 6365. Exercise and the Cardiorespiratory System (4). Prerequisite: Advanced exercise physiology. A study of the cardio-respiratory system during exercise and the adjustments within the system to exercise training and other stressors.

PET 6368. Metabolic Responses to Exercise (3). Consideration of the processes involved in the production and utilization of energy in exercise and the effects of training.

PET 6386. Environmental Aspects of Exercise (3). Focuses on the effects of temperature, altitude, and air pollution on exercise performance. Offered alternate years.

PET 6387. Endocrinology in Health and Exercise (3). Prerequisite: APK 5111C or equivalent level of Exercise Physiology course. This course is an in-depth examination of the physiological principles and mechanisms of endocrinology as related to exercise and overall health. Students gain an understanding of the endocrine organs, hormone classifications, and detailed mechanisms of action for selected hormones. The influence of exercise and disease on acute and chronic human endocrine function is investigated. In addition, the role of chemical mediators and nutrition in coordinating the function of the endocrine system is investigated.

PET 6388. Exercise and Disease (3). Prerequisite: APK 3110C. This course in exercise and chronic diseases is designed to provide students with an understanding of recent advances in exercise physiology for clinical populations. Specific topics addressed include pathophysiology of disease process, clinical considerations, and exercise rehabilitation in clinical populations. Particular emphasis is placed on the acute and chronic physiological responses to exercise in healthy older individuals and in patients with diabetes, obesity, coronary heart disease, chronic heart failure, hypertension, stroke, and peripheral arterial disease.

PET 6930r. Seminar in Movement Sciences (1). Doctoral student presentations concerning current research and developments in exercise physiology, and motor learning/control.

PET 6931r. Advanced Topics (1-4). Integration of facts, principles, and theories into a practical philosophy in the area of specialization of instructor teaching the course any given semester. May be repeated to a maximum of twelve semester hours.

OCEANOGRAPHY: see Earth, Ocean, and Atmospheric Sciences

Graduate Department of PHILOSOPHY

COLLEGE OF ARTS AND SCIENCES

Website: <http://philosophy.fsu.edu/>

Chair: J. Piers Rawling; **Professors:** Bishop, Clarke, LeBar, Mele, Rawling, Schwenkler; **Associate Professors:** Hinchman, Justus, Kearns, May, Morales, Roberts, Stein, Westlund; **Assistant Professors:** Bukoski, Herdova; **Senior Teaching Faculty:** Mahaffey; **Assistant Teaching Faculty:** Vincent

The department offers both the Master of Arts (MA) and the Doctor of Philosophy (PhD) degrees in philosophy. The faculty has a diverse set of interests with special strength in areas such as ancient philosophy, action theory, ethics, metaphysics, political philosophy, philosophy of mind and cognitive science, and philosophy of science.

Fellowships and assistantships are available for the support of fifty-five to sixty graduate students. Each type of support includes out-of-state and in-state tuition remission. Philosophy students are frequently successful in the competition for University fellowships. The department offers approximately ten new assistantships each year. There are also specialized fellowship and assistantship opportunities available for minority students.

The department has a regular program of visiting speakers and conferences, and since 1970 has published the journal *Social Theory and Practice*. These activities provide many opportunities for graduate students to be initiated into the professional community. Graduate students have an opportunity to gain teaching experience during their years of study. Such experience is invaluable for securing an academic appointment. Our graduates have a high rate of success in obtaining college and university employment.

Admission Requirements

To be admitted to graduate study in philosophy, an applicant normally needs the following:

1. A background in philosophy;
2. Minimum grade point average (GPA) of 3.0 in the last two years of undergraduate study;
3. Competitive scores on the verbal and quantitative sections of the Graduate Record Examination (GRE).

Note: Neither the department nor the University has a minimum score requirement, but a competitive graduate application will usually have scores at or above the 90th percentile (162) on the verbal section and the 65th percentile (156) on the quantitative. However, the department evaluates applicants using several additional criteria that may outweigh lower GRE scores.

Requirements

Please review all college-wide requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

The department encourages students who are interested in receiving a PhD to enroll directly into that program. The department will admit students into the MA program, but those interested in a teaching career in philosophy will need to gain the PhD. After completing at least thirty-three semester hours and the successful defense of an original thesis or completion of additional coursework, students will be entitled to receive an MA. The department's *Graduate Handbook* contains detailed information concerning requirements and procedures for the graduate program and constitutes the complete statement of departmental policies and rules governing graduate study.

Doctoral students must pass the following classes with a grade of "B" or better:

PHI 6935 (I) Proseminar in Value Theory (3)

PHI 6935 (2) Proseminar in Theoretical Philosophy (3)

Students must also pass PHI 5135, Modern Logic I, with a grade of "B-" or better.

Doctoral students will take a preliminary examination in a special area related to the student's dissertation topic.

Doctoral students must complete at least ninety semester hours, including a minimum of twenty-four semester hours of dissertation work. Students will fulfill a breadth requirement by taking seminars in several required areas. When deemed necessary for their dissertation topic, students will be required to demonstrate a reading knowledge of a foreign language.

Students are required to give an oral defense of their dissertation prospectus. The PhD in philosophy is awarded upon the successful oral defense of an original dissertation.

Master's students must pass PHI 6935 (I) and 6935 (II) with a grade of "B" or better.

Students must also pass PHI 5135 with a grade of "B-" or better.

Each student must maintain a cumulative GPA of at least 3.0. The department may at any time terminate the work of a student whose academic progress is judged unsatisfactory, and failure to maintain a satisfactory GPA is grounds for dismissal from the program.

Graduate Certificate in Bioethics

Program Director: J. Piers Rawling, Professor and Chair of Philosophy;

Associate Program Director: Tracie Mahaffey, Senior Teaching Faculty

The Graduate Certificate in Bioethics is designed to meet the needs of current graduate students, as well as individuals working in the areas of health care, health policy, and biomedical research. The certificate will help prepare graduate students and working healthcare professionals for leadership and administrative positions, and membership on ethics committees and IRBs. It will also benefit students who wish to enroll in graduate and professional degree programs, and/or compete for prestigious fellowships in bioethics and clinical bioethics.

Students who successfully complete the certificate program will be able to (a) analyze ethical situations, particularly those that arise in medical and scientific contexts, from various theoretical perspectives; (b) evaluate the ethical dimensions of policies and practices involved with health care, public health, patient advocacy, medical and scientific research, and related areas; and (c) communicate their analyses through written and oral methods to both technical and non-technical audiences.

Application Procedure

Students interested in completing the Graduate Certificate in Bioethics (which is not intended as a diploma or a degree) should submit a completed application form to the Philosophy Department at: philosophy@admin.fsu.edu.

Admission Requirements

The Graduate Certificate in Bioethics program is open to currently enrolled Florida State University graduate students who are in good standing. In addition, anyone not currently enrolled in a Florida State University degree program can pursue the certificate by enrolling as a non-degree-seeking student (provided they have a BA or BSc from an accredited institution, which is the only prerequisite for this certificate program). Applicants must be admitted to the certificate program in advance of beginning any coursework.

Certificate Requirements

The Graduate Certificate in Bioethics program comprises twelve hours of graduate coursework, to be completed within five years. Students are required to earn a “B–” or better in each class and must achieve an overall GPA of 3.0 in order for the certificate to be granted. Students may transfer up to three hours of graduate coursework toward the certificate, subject to course review and approval by the Certificate Director or Associate Director.

Required Courses

- Theoretical Foundations of Applied Ethics (three hours).** This course surveys major ethical theories and their relation to applied ethics, especially biomedical ethics and health policy. The course will include examination and discussion of ethical theories such as consequentialism, duty-based theories, rights-based theories, virtue ethics, and casuistry.
 - Bioethics (three hours).** This course serves as a graduate-level introduction to some of the topics, texts, and methods of the field of biomedical ethics.
 - Capstone Course (three hours).** In the capstone course, students will plan, research, and complete a project paper focusing on an ethical problem in one of the following:
 - Clinical ethics (for those professionals interested in, for example, hospital ethics committees or ethics consultation),
 - Research ethics (for those interested in, for instance, serving on an IRB or IACUC or otherwise consulting about research ethics), or
 - Public policy (for those interested in, for example, working on the development and implementation of health care policy).
- Elective Course Topics (students take one):
- Philosophy of Medicine (three hours).** This course examines philosophical issues that arise in conceptualizing the aims and practices of medicine and medical science within broader cultural contexts.
 - Special Topics in Bioethics (three hours).** This is a research seminar on selected problems in biomedical ethics.

Definition of Prefixes

PHH—Philosophy, History of

PHI—Philosophy

PHM—Philosophy of Man and Society

Graduate Courses

PHH 5105r. Greek Philosophy (3). Detailed study of Plato, Aristotle, or one of the schools or divisions of ancient thought (pre-Socratics, Stoicism, etc.). May be repeated to a maximum of twelve semester hours.

PHH 5405r. Modern Philosophy (3). A critical study of selected major western philosophers of the seventeenth and eighteenth centuries, with an emphasis on logic, epistemology, and metaphysics. May be repeated to a maximum of twelve semester hours.

PHH 5505r. 19th-Century Philosophy (3). A study of either a major philosopher (e.g., Hegel, Marx, Mill) or philosophic movement (e.g., idealism, positivism, Marxism) of the nineteenth century. May be repeated to a maximum of twelve semester hours.

PHH 5609r. Contemporary Philosophy (3). A detailed critical examination of selected figures and topics in twentieth-century philosophy. May be repeated to a maximum of twelve semester hours.

PHH 6009r. Studies in the History of Philosophy (3). A course on major philosophers and trends that may bridge or extend over more than one distinct chronological period. May be repeated to a maximum of twelve semester hours.

PHI 5135. Modern Logic I (3). Prerequisite: PHI 3130, equivalent, or instructor permission. A course in the metatheory of first order logic. A mastery of the syntax and semantics of, and a natural deduction system for, first order logic is presumed. Among other results, the soundness and completeness of such a natural deduction system, and Gödel’s first incompleteness theorem, are proved.

PHI 5136r. Modern Logic II (3). Prerequisite: PHI 3130, or equivalent; or instructor permission. An exploration of one or more non-classical logics, such as intuitionistic, many-valued, modal, provability, quantum, relevance, and tense. A mastery of the syntax and semantics of, and a natural deduction system for, first order logic is presumed. May be repeated to a maximum of twelve semester hours.

PHI 5555. Core Course in Metaphysics and Epistemology (3). This course is a broad survey in contemporary metaphysics and epistemology requiring intensive study of works by such influential 20th-century analytic philosophers as Quine and Kripke. A selection of the following topics is covered: existence, identity, modality, universals, causation, free will, truth, the mind-body problem, theories of knowledge, skepticism, and naturalized epistemology.

PHI 5665. Core Course in Ethics (3). This course examines normative ethics and metaethics, including such topics as consequentialism, contractualism, deontology, divine command theory, expressivism, intuitionism, and realism. The survey also includes reference to historical figures such as Socrates, Plato, Aristotle, Hobbes, Hume, Kant, Bentham, and Mill.

PHI 5908r. Directed Individual Study (1–3). (S/U grade only). May be repeated to a maximum of twelve semester hours. For degree restriction see graduate handbook.

PHI 5913r. Supervised Research (1–5). (S/U grade only). A maximum of three hours may apply to the master’s degree. May be repeated to a maximum of five semester hours.

PHI 5934r. Topics in Philosophy (3). A variable content research seminar on selected philosophical problems. May be repeated to a maximum of twelve semester hours.

PHI 5945r. Supervised Teaching (1–5). (S/U grade only). A maximum of three hours may apply to the master’s degree. May be repeated to a maximum of five semester hours.

PHI 5956. Introduction to Philosophical Methods (3). Prerequisite: Instructor permission required. An introduction for graduate students that offers a critical review and analysis of various techniques of philosophical writing (e.g., textual interpretation, argument analysis, commentary on a philosophical paper). This is a writing-intensive course of varying content.

PHI 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

PHI 5998r. Tutorial in Philosophy (1–3). Critical readings and discussions of important classical and contemporary philosophical texts. Variable content. Variable credit: one to two semester hours for a reading course; three semester hours for a reading course with substantial writing. Repeatable with the instructor permission to a maximum of twelve semester hours.

PHI 6205r. Philosophical Logic (3). Prerequisite: PHI 3130, equivalent; or instructor permission. An exploration of philosophical issues concerning logic and its applications. Topics such as counterfactuals; logical consequence; the range and nature of quantification; the relation of logic to language and thought; the relation of logic to mathematics; truth; vagueness. A mastery of the syntax and semantics of, and a natural deduction system for, first order logic is presumed. May be repeated to a maximum of twelve semester hours.

PHI 6225r. Philosophy of Language (3). Selected topics, such as the following: theories of truth, meaning, and reference; vagueness; and in-depth readings of figures such as Tarski, Frege, Russell, Wittgenstein, and Kripke. May be repeated to a maximum of twelve semester hours.

PHI 6306r. Epistemology (3). A seminar on one or more main topics in contemporary analytic epistemology, such as skepticism, the definition of knowledge, theories of justification, the internalism/externalism debate, naturalized epistemology, virtue epistemology and contextualism. May be repeated to a maximum of twelve semester hours.

PHI 6325r. Philosophy of Mind (3). A critical exploration of one or more of the major problems in the philosophy of mind, such as mental causation, intentionality, consciousness, personal identity, and the mind-body problem. May also include issues arising from the intersection of philosophy of mind and psychology, cognitive neuroscience, and other sciences of the mind. May be repeated to a maximum of twelve semester hours.

PHI 6406r. Philosophy of Science (3). A critical exploration of major problems in the philosophy of science for students in the sciences and philosophy. May be repeated to a maximum of twelve semester hours.

PHI 6425r. Philosophy of Social Sciences (3). A philosophical examination of some key issues in social scientific inquiry. Topics to be explored include human action, explanation and prediction, role of values, theory construction, ideology, and social science and public policy. May be repeated to a maximum of twelve semester hours.

PHI 6455. Philosophy of Biology: Basic Topics (3). A survey of basic topics in the philosophy of biology, including the nature of evolutionary theory, the coming of genetics, molecular biology and its philosophical implications, the Human Genome Project, Creationism, eugenics, and ecological questions.

PHI 6457r. Philosophy of Biology: Selected Topics (3). A study of advanced topics in philosophy of biology, including game-theoretic explanations in biology, the units of selection problem, reductionism in biology, systematics, and socio-biology and the is/ought gap. May be repeated to a maximum of nine semester hours.

PHI 6506r. Metaphysics (3). A study of one or more topics in contemporary metaphysics, for example, ontology, free will, time, causation, and properties. May be repeated to a maximum of twelve semester hours.

PHI 6607r. Ethics (3). Selected topics, such as the following: topics in the history of ethics, twentieth-century ethical theory, historical figures (e.g., Kant, Mill, Hobbes, Hume,) kinds of theory (e.g., consequentialism, contractualism, rationalism,) metaethical debates, axiology, and practical rationality. May be repeated to a maximum of twelve semester hours.

PHI 6935r. Seminar in Philosophical Topics (3). A research seminar on a topic to be determined by the instructor's current research interests. Intensive and advanced. May be repeated to a maximum of twelve semester hours.

PHI 6980r. Dissertation (1-12). (S/U grade only).

PHM 6205r. Social and Political Philosophy (3). A critical examination of schools of thought (e.g., liberalism, utilitarianism, Marxism, communitarianism, feminism), or of central issues (e.g., justice, equality, race) in social/political philosophy. May focus on historical or contemporary approaches and/or philosophers. May be repeated to a maximum of twelve semester hours.

Examinations

PHI 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

PHI 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

PHI 8976r. Master's Thesis Defense (0). (P/F grade only.)

PHI 8985r. Dissertation Defense (0). (P/F grade only.)

PHOTOGRAPHY:
see Art

PHYSICAL SCIENCE:
see Physics

Graduate Department of PHYSICS

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.physics.fsu.edu/>

Chair: Paul Eugenio; **Associate Chair:** Nicholas Bonesteel; **Professors:**

Adams, Blessing, Boebinger, Bonesteel, Cao, Capstick, Chiorescu, Cottle, Credé, Dobrosavljevic, Duke, Eugenio, Green, Hill, Hoeflich, Manousakis, Owens, Piekarewicz, Prosper, Reina, Riley, Roberts, Tabor, Vafek, Van Winkle, Volya, Wiedenhoever, Xiong, Yang; **Associate Professors:** Askew, Collins, Febres Cordero, Gao, Huffenberger, Lind, Ng, Okui; **Assistant Professors:** Almaraz-Calderon, Beekman, Changlani, Dobbs, Hsiao, Kolberg, Murphy, Ni, Spieker, Tobioka, Tripathi, Yohay; **Professors Emeriti:** Albright, Berg, Desloge, Fletcher, S. Hagopian, V. Hagopian, Kemper, Kimel, Owens, Philpott, Rikvold, Robson, Schlottmann, Skofronick, von Molnar

The Department of Physics offers programs of study leading to the Master of Science (MS) and Doctor of Philosophy (PhD) degrees. The department is strongly committed to graduate education and supports it by maintaining a strong, well-funded, and diverse research program.

A basic goal of the program of graduate education is to prepare students for careers in research and related fields. It is intended that graduates will have the education and training necessary to enable them to make fundamental contributions to knowledge in physics or their chosen field. Further, it is anticipated that they will be peers with the next generation of technology leaders in industry, government, and academia.

The faculty believes that the quality of teaching, at all levels, is enhanced by a strong research program. Undergraduates, graduate students, and post-doctoral fellows participate in all aspects of research in physics at Florida State University. In fact, most undergraduate physics majors participate in research projects and many are co-authors on publications. This research includes strong programs in the area of computational physics and both experimental and theoretical studies in high energy, nuclear, condensed matter, astrophysics, and atomic and molecular physics. There are also many opportunities for interdisciplinary research, particularly in the Integrative NanoScience Institute (INSI), the National High Magnetic Field Laboratory (NHMFL), the Department of Scientific Computing, and the Institute of Molecular Biophysics (IMB).

Available experimental facilities include the following: a 9.5 MV Super FN Tandem Van de Graaff accelerator with superconducting post accelerator, the RESOLUT radioactive beam facility, a state-of-the-art gamma spectroscopy array, electron spin resonance and electron double nuclear resonance spectrometers, a detector development laboratory for high-energy particle detectors, liquid helium refrigerators, thin film preparation facilities including sputtering and laser ablation, ultrahigh vacuum instrumentation including surface analysis (LEED, Auger, optical) and molecular beam epitaxy, synthesis and characterization facilities for novel materials, three X-ray diffractometers with various sample stages for high and low temperature studies, multi-sample analysis and small angle studies, scanning electron, tunneling and optical microscopies with image analysis, SQUID and vibrating sample magnetometers, and a helium atom surface scattering facility. The NHMFL provides a modern infrastructure enabling research in magnetic fields including the highest-powered DC fields in the world, mainly used for materials science research, and facilities providing the highest fields in the world for nuclear, ion cyclotron, and electron magnetic resonance spectrometers, as well as magnetic resonance imaging.

Computational resources are an integral part of scientific research in the department and play an increasingly important role in preparing students for careers in both commercial and academic fields. Recent advances in data acquisition, algorithm development, and computer hardware have made high performance computing fundamentally necessary to remain competitive. The Physics Department has been actively involved in high performance computing for many years. Researchers in the department are responsible for the design, acquisition, installation, and operations of many computing clusters with an aggregate of over 1000 CPUs and over 100 terabytes of disk storage. The University has acquired a wide array of computing facilities to meet its research needs and maintains an ambitious plan to continually upgrade current shared supercomputing facilities. Since 1993, FSU has maintained high performance computing facilities on campus, which have consistently put the University on the "Top 500 Supercomputer" site (<http://www.top500.org>). The shared-HPC facility is capable of over thirty-eight TFLOPS. The system consists of over 3800 CPU cores. Inter-process communication runs over an Infiniband network. All compute and log in nodes have access to a 190 TByte Panasas high performance parallel Object Storage Device. The HPC general access network infrastructure is connected to FSU's ten-Gbps campus network backbone and to the ten-Gbps Florida Lambda Rail.

Requirements

Please review all college-wide degree requirements summarized in “College of Arts and Sciences” chapter of this *Graduate Bulletin*. The physics department also has a *Guide to Graduate Studies in Physics at Florida State University*. This booklet contains requirements and advice to students studying graduate physics.

Course Requirements

The physics department offers six core graduate courses that every student must pass with a cumulative grade average of no less than “B.” These courses are:

- PHY 5246, Theoretical Dynamics;
- PHY 5524, Statistical Mechanics;
- PHY 5346 and PHY 5347, Electrodynamics A and B;
- PHY 5645 and PHY 5646, Quantum Mechanics A and B.

For the **master’s** degree a student must take at least three of the above core courses, including at least one course in quantum mechanics. For the **doctoral** degree, the student is required to also take either: PHY 5667, Quantum Field Theory; or PHY 5670, Quantum Many-Body Physics. After attaining mastery of the content of the core graduate courses, a PhD student is required to take two of the following six courses: PHZ 5305, Nuclear Physics I; PHZ 5315, Nuclear Astrophysics; PHZ 5354, High Energy Physics I; PHZ 5491, Condensed Matter Physics I; or PHZ 5715, Biophysics I. In addition, the student is required to complete one more course from the following set: AST 5245, Radiative Processes in Astronomy; PHZ 5307, Nuclear Physics II; PHZ 5355, High Energy Physics II; PHZ 5492, Condensed Matter Physics II; PHZ 5669, Quantum Field Theory B; or PHZ 5716, Biophysics II, and at least one of the following courses: AST 5765, Advanced Analysis Techniques in Astronomy; AST 5760, Computational Astrophysics; PHY 5669, Quantum Field Theory B; PHY 6937, Selected Topics in Physics (Materials Characterization); or PHY 6938, Selected Topics in Physics (Phase Transitions and Critical Phenomena). Though there are no other specific course requirements, the student is encouraged to take other specialized courses that are offered by the physics department. Please check the departmental Web page at <http://physics.fsu.edu/graduates>, as adjustments to the program of study are made routinely.

Examinations

Master’s Comprehensive Examination — PHY 8966. For thesis students this examination is the defense of the thesis. For non-thesis students, this oral examination is given by three physics faculty members and covers the subjects of mechanics, quantum mechanics, and electromagnetism. One of these areas, chosen by the student, will be examined at the graduate core course level. This examination is waived for students who have completed four of the graduate core courses, including one in Quantum Mechanics (PHY 5645 or PHY 5646), with an average grade of “B” or better.

Qualifying Examination. This examination is the written examination that all students must pass within the first two years to be able to continue toward the PhD degree. Any student who elects to strengthen their upper-level undergraduate physics background by taking one or more of our cross-listed undergraduate courses gets four tries at the written qualifier exam, but these start after their first year here, i.e. at the beginning of their second year.

Preliminary Doctoral Exam — PHY 8964. The PhD preliminary examination consists of: 1) a written tentative prospectus of a research topic suitable for PhD dissertation; and 2) an oral examination by the student’s supervisory committee on the tentative prospectus administered.

PhD Dissertation Defense — PHY 8985. The last examination is the oral dissertation defense given by the candidate’s Supervisory Committee, which has two parts: a public presentation of the dissertation topic, and second, a closed portion where only the graduate faculty can attend. The length of each portion is decided by the supervisory committee.

Master’s Degree Requirements

Both thesis and non-thesis programs are offered leading to the master’s degree. The student must complete the specific course requirements listed above. Every candidate is required to teach one elementary laboratory for one semester.

To qualify for a non-thesis degree, a student must complete thirty-three semester hours in courses numbered 5000 and above. At least twenty-one semester hours must be taken on a letter grade basis. Students earning the non-thesis degree must earn a B (3.0) average on at least twelve credits of course classes (PHY 5246, 5346, 5347, 5524, 5645, and 5646) including at least one course in Quantum Mechanics.

Thesis students must complete thirty semester hours in courses numbered 5000 and above. At least eighteen semester hours must be taken on a letter

grade basis. A minimum of six semester hours must be earned in PHY 5971 (Thesis). Students earning the thesis degree must earn a B (3.0) average on at least nine credits of core classes (PHY 5246, 5346, 5347, 5524, 5645 and 5646) including at least one course in Quantum Mechanics.

For both thesis and non-thesis degrees, students must maintain a 3.0 GPA. In addition, no more than three semester hours each of PHY 5918 (Supervised Research) and 5940 (Supervised Teaching) may be counted toward the required semester hours.

PhD Degree Requirements

An MS degree is not required for the PhD degree. Before a student can be admitted to candidacy for the PhD degree, the student must: 1) pass all six graduate-level core courses with a cumulative grade average of no less than “B” and 2) pass the preliminary doctoral examination. In addition, each doctoral candidate is required to teach two elementary laboratory sections for one semester. After completing all of the above-mentioned requirements, the student is admitted to PhD candidacy and can register for PHY 6980 (Dissertation). There are time limits between examinations specified in the *Physics Graduate Studies Guide*. Students must have a minimum of twenty-four credit hours of PHY 6980 (Dissertation) before they can defend their Dissertation.

Each student is required to choose a major professor no later than during the second semester. The major professor, in consultation with the student, will form a supervisory committee no later than one month before the student is ready to take the oral portion of the preliminary doctoral examination. The committee must meet and review the student’s progress annually. The composition of the supervisory committee is specified in the *Physics Graduate Studies Guide*.

Research is an integral part of a PhD program and students are encouraged to start as soon as possible. No student can stay in the PhD program beyond the sixth semester (each summer counts as one semester) without giving evidence of explicit research accomplishments. The various options to satisfy this requirement are specified in the *Student Handbook*.

Definition of Prefixes

AST—Astronomy

PHY—Physics

PHZ—Physics: Continued

Graduate Courses

Note: The prerequisites are to be interpreted rather liberally; in general, instructor permission can replace any prerequisite.

AST 5210. Introduction to Astrophysics (3). Prerequisites: MAC2312 and PHY2049C. This course introduces science majors to key aspects and concepts of modern astronomy and astrophysics. Topics cover coordinate systems, instrumentation, our sun and planets, stars and stellar evolution, binary systems and variable stars, stellar explosions, galaxies, as well as the evolution of the universe.

AST 5219r. Astrophysics Seminar (1). Prerequisite: AST 5210. This seminar introduces students to current research topics in astronomy and astrophysics through the presentation and discussion of recently published research papers, own research work, and occasional review publications. Topics cover observational and theoretical astrophysics alike. May be repeated to a maximum of two semester hours.

AST 5245. Radiative Processes in Astronomy (3). Prerequisite: AST 5210. Corequisite: PHY 4604. This course provides an introduction to radiation processes and their applications to astrophysical phenomena and space science for senior or first-year graduate students. Topics cover radiative transfer theory, radiation hydrodynamics and matter-light interactions in the interstellar medium and star-forming regions, stellar atmospheres, exploding stars, as well as galaxies.

AST 5342. Hydrodynamics and Plasma for Astrophysics (3). This course is an introduction to the hydrodynamics, plasma physics, and magnetohydrodynamics (MHD) necessary for an understanding of astrophysical processes. No prior knowledge of hydrodynamics is needed.

AST 5416. Cosmology and Structure Formation (3). Prerequisites: AST 4211 and PHY 3101. This course covers the evolution of the universe from the “Hot Big Bang” to the current epoch. Topics include cosmological expansion, the Hubble constant and other cosmological parameters, the microwave-background radiation, early universe nucleosynthesis, the growth of large-scale structure, the “dark ages” and the re-ionization of the universe, the horizon and other fine-tuning problems, distance determinations, redshift surveys, inflation, cosmological acceleration, as well as dark matter and dark energy.

AST 5418. Extragalactic Astronomy (3). Prerequisite: AST 4211. This course offers a survey of the physics and phenomenology of galaxies and galaxy structures. Topics include stellar populations, classification systems, interstellar and intergalactic material, chemical abundances and evolution, galaxy formation, structure, dynamics and evolution, extragalactic distance determination, interacting systems, as well as active galactic nuclei.

AST 5725. Observational Techniques in Astrophysics (3). Prerequisite: AST 4211. This course covers principles and techniques used in obtaining modern astronomical data. Includes an overview of current and next-generation astronomical instrumentation, discussion of calibration schemes and observing strategies, and an introduction to analysis techniques.

AST 5760. Computational Astrophysics (3). Prerequisite: AST 5210. Corequisites: CGS 3406 or PHY 4151C. This course offers an introduction to numerical methods in the context of observational and theoretical astrophysics. Topics cover interpolation approximation, minimization and optimization, solution of linear systems of equations, random number generation, function integration, numerical differentiation, numerical integration of ordinary differential equations, stiff systems of ODEs, as well as a survey of methods for partial differential equations, such as Poisson equation, heat diffusion, and hydrodynamics.

AST 5765. Advanced Analysis Techniques in Astronomy (3). Prerequisite: AST 4722 and AST 4211. This course offers a survey of advanced data-analysis and statistical techniques available to modern astronomical researchers. Topics include subpixel imaging, image deconvolution, point-spread function modeling, crowded field photometry, survey completeness, Malmquist and other statistical biases, automated data mining, image differencing techniques, astrometric solutions, working with low-signal-to-noise data, fitting models to data, modeling synthetic data, as well as real-world error determination.

PHY 5228. Mechanics II (3). Prerequisite: PHY 3221, PHZ 3113, or instructor permission. This course covers Lagrangian dynamics, Hamiltonian dynamics, dynamics of rigid bodies, coupled oscillations, waves in one-dimensional continuous systems, and special relativity.

PHY 5246. Theoretical Dynamics (3). Prerequisite: PHY 4222. Lagrangian mechanics, central force motion, rigid body motion, small oscillations, Hamiltonian mechanics, canonical transformations, Hamilton-Jacobi theory variational principles.

PHY 5326. Electricity and Magnetism I (3). Prerequisite: PHY 3221, PHZ 3113, or instructor permission. This course covers electric fields for static charge distributions, electric fields in matter, magnetic fields for constant current configurations, magnetic fields in matter, and Maxwell's equations.

PHY 5327. Electricity and Magnetism II (3). Prerequisite: PHY 5326 or instructor permission. This course covers electromagnetic wave solutions to Maxwell's equations; reflection, transmission, dispersion, and absorption of electromagnetic waves; scalar and vector potentials; electromagnetic dipole radiation; electrodynamics; and relativity.

PHY 5346. Electrodynamics A (3). Prerequisite: PHY 4324 or 5327. Electrostatics, magnetostatics, time-varying fields, production and propagation of electromagnetic radiation, special theory of relativity, covariant electrodynamics.

PHY 5347. Electrodynamics B (3). Prerequisite: PHY 4324 or 5327. Electrostatics, magnetostatics, time-varying fields, production and propagation of electromagnetic radiation, special theory of relativity, covariant electrodynamics.

PHY 5515. Thermal and Statistical Physics (3). The fundamental laws of thermodynamics and their application to simple systems. The kinetic theory of an ideal gas. An introduction to the classical and quantum statistical mechanics of weakly interacting systems.

PHY 5524. Statistical Mechanics (3). Prerequisites: PHY 4513 or 5515, 4605 or 5608r, 5246. Classical and quantum statistics of weakly interacting systems, ensembles, statistical thermodynamics.

PHY 5607r. Quantum Theory of Matter A (3). Quantum mechanics and its applications to particles, nuclei, atoms, molecules, and condensed matter. May be repeated within the same term.

PHY 5608r. Quantum Theory of Matter B (3). Quantum mechanics and its applications to particles, nuclei, atoms, molecules, and condensed matter. May be repeated within the same term.

PHY 5645. Quantum Mechanics A (3). Prerequisite: PHY 4605 or 5608r. Development of quantum theory from wave mechanics to matrix mechanics, approximation methods with applications in modern physics, elementary scattering theory, relativistic quantum theory.

PHY 5646. Quantum Mechanics B (3). Prerequisite: PHY 4605 or 5608r. Development of quantum theory from wave mechanics to matrix mechanics, approximation methods with applications in modern physics, elementary scattering theory, relativistic quantum theory.

PHY 5657. Group Theory and Angular Momentum (3). Prerequisite: PHY 5645. Corequisite: PHY 5646. This course examines the following: symmetries and group theory; permutation groups and crystallographic groups; continuous groups and Lie algebras; SU(2) and angular momentum; SU(3) flavor and color; SU(N) Lie algebras and examples.

PHY 5667. Quantum Field Theory (3). Prerequisites: PHY 5246, 5346, 5347, 5645, or instructor permission. Lagrangian Field theory, quantization of scalar, spinor, and vector fields, perturbation theory, renormalization, quantum electrodynamics.

PHY 5669. Quantum Field Theory B (3). Prerequisite: PHY 5667. This course is the second semester of quantum field theory, and examines path integral quantization, renormalization, renormalization group, non-Abelian gauge theories and the Standard Model.

PHY 5670. Quantum Many-body Physics (3). Prerequisites: PHY 5246, 5346, 5524, 5645, 5646. This course examines quantum many-body physics as applied to condensed matter, atomic, and nuclear physics.

PHY 5904r. Directed Individual Study (3). May be repeated to a maximum of thirty-six semester hours.

PHY 5909r. Directed Individual Study (1-12). (S/U grade only). May be repeated to a maximum of forty-eight semester hours.

PHY 5918r. Supervised Research (1-5). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

PHY 5920r. Colloquium (1). (S/U grade only). A series of lectures given by faculty and visiting scientists. May be repeated to a maximum of ten semester hours.

PHY 5930. Introductory Seminar on Research (1). (S/U grade only). A series of lectures given by faculty on the research being conducted by the physics department.

PHY 5940r. Supervised Teaching (0-5). (S/U grade only). Laboratory teaching under the direction of a senior faculty member. A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

PHY 5971r. Thesis (3-6). (S/U grade only). A minimum of six semester hours is required.

PHY 6937r. Selected Topics in Physics (1-3). Prerequisite: Graduate standing. May be repeated to a maximum of fifteen semester hours.

PHY 6938r. Special Topics in Physics (3). (S/U grade only). Each semester a number of courses labeled PHY 6938r may be scheduled. The exact content of each of these courses will depend on the interests and needs of the students and faculty. Proposals for special topics courses will be submitted by individual faculty members to the Graduate Affairs Committee three months prior to the scheduling of these courses. Student or faculty groups are encouraged to approach an appropriate faculty member and persuade him or her to submit a proposal for a course they feel is needed. The following titles reflect potential offerings: Models and Reactions in Nuclear Physics, Experimental Methods in Nuclear Physics, Theoretical Nuclear Physics, Intermediate Energy Nuclear Physics, Quantum Field Theory, Phenomenological Theories in Particle Physics, Experimental Methods in Particle Physics, Solid State Theory, Theory of Magnetism, Advanced Quantum Mechanics, Molecular Quantum Mechanics, Advanced Statistical Physics, Atomic Structure, Theory of Infrared Spectra, Electron and Atom Collisions, Molecular Collisions, General Relativity and Cosmology, Astrophysics, Magnetic Resonance. May be repeated to a maximum of eighteen semester hours.

PHY 6941r. Graduate Tutorial in Physics (1-3). (S/U grade only). Prerequisite: Graduate standing. Selected topics in modern physics. Readings and analysis of primary literature. Maximum of eight students in each tutorial. May be repeated to a maximum of fifteen semester hours.

PHY 6980r. Dissertation (1-12). (S/U grade only).

PHY 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

PHY 8976r. Master's Thesis Defense (0). (P/F grade only.)

PHY 8985r. Dissertation Defense (0). (P/F grade only.)

PHZ 5156C. Computational Physics Laboratory (3). Prerequisites: COP 2000; MAP 3305; PHY 4222 or instructor permission. An introduction to the use of computers to solve computationally intensive problems, including basic instruction in physics problem solving using numerical solutions to differential equations, numerical integration, Monte Carlo, partial differential equations, linear algebra, distributed processing and symbolic algebra. The course also provides instruction in computational techniques and software development skills and practice in using network and software development tools including telnet, ftp, spreadsheets, databases, code management systems, and the World Wide Web.

PHZ 5305. Nuclear Physics I (3). Corequisite: PHY 5670. Selected topics in nuclear structure and nuclear reactions.

PHZ 5307. Nuclear Physics II (3). Corequisite: PHY 5670. Selected topics in hadronic physics, experimental techniques and facilities, nuclear astrophysics, and the use of the nucleus as a laboratory.

PHZ 5315. Nuclear Astrophysics (3). Prerequisite: AST 5210. Corequisite: PHY 4604. This course offers an introduction to the role of nuclear reactions and decay in astrophysics. Topics cover the origin of elements in the context of Big Bang, major burning stages in the life of a star, stellar explosions, as well as processes in interstellar matter.

PHZ 5354. High-Energy Physics I (3). Corequisite: PHY 5670. Classification of elementary particles, particle detectors and accelerators, invariance principles and conservation laws, hadron-hadron interactions, static quark model of hadrons, electromagnetic interactions, the unification of electroweak and other interactions.

PHZ 5355. High-Energy Physics II (3). Corequisite: PHY 5670. Advanced topics in particle physics, perturbative techniques and applications, nonperturbative techniques and applications, standard model predictions, extensions of the standard model.

PHZ 5475. Materials Characterization (3). This course is an introduction to a large variety of materials characterization techniques that have been developed and are currently used in materials science research.

PHZ 5491. Condensed Matter Physics I (3). Corequisite: PHY 5670. Crystal structure phonons, electron in metals, semiconductors, magnetism, ferroelectrics, liquid crystals.

PHZ 5492. Condensed Matter Physics II (3). Corequisite: PHY 5670. Elementary excitations in solids, the many-body problem, quantum fluids and superconductivity, magnetism, dielectric, collective effects in fluids.

PHZ 5606. Special and General Relativity (3). Prerequisites: PHY 5226, 5326. This course examines the following topics: special theory of relativity, tensor analysis and curvature, general theory of relativity, experimental tests, black holes, gravitational radiation, and cosmology.

PHZ 5715. Biophysics I (3). Physical bases of biological systems and biological processes, basic theories of thermodynamics and kinetics, key experimental techniques, simple physical models, realistic molecular modeling.

PHYSIOLOGY:
see Biological Science; Medicine

Graduate Department of POLITICAL SCIENCE

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <http://coss.fsu.edu/polisci>

Chair: Charles Barrilleaux; **Leroy Collins Eminent Scholar:** C. Weissert; **Leroy Collins Professor:** Barrilleaux; **Syde P. Deeb Eminent Scholar & Marian D. Irish Professor:** W. Berry; **Professors:** Crew, Jackson, Souva, W. Weissert;

Associate Professors: Beazer, Coleman, Driscoll, Ehrlich, Gomez, Grosser, Kern, Rainey, Reenock; **Assistant Professors:** Ahler, Carroll, Cunha, Duque, Hassell, Li, Ou, Pietryka, Whyman; **Assistant In:** Nagar; **Teaching Faculty:** Kile; **Affiliated Faculty:** F. Berry, Feiock, Landau, Metcalf **Professors Emeriti:** Atkins, Dye, Flanagan, Glick, Gray, Kim, Palmer, Scholz

The Department of Political Science offers graduate programs leading to the Master of Science (MS) and Doctor of Philosophy (PhD) degrees. Instruction is offered in the following fields: American politics, comparative politics, international relations, public policy, methods of political analysis, and formal theory.

Admission

Students pursuing a Doctor of Philosophy (PhD) or Master of Science (MS) in political science are admitted to the graduate program to begin study in the Fall semester only. Decisions about admission are usually based on the Graduate Record Examinations (GRE) scores and undergraduate and graduate work already completed, as well as letters of recommendation and the applicant's own statement of interests and goals. The department seeks a target score of 155 or higher on the Quantitative section, 160 or higher on the Verbal section, and 4.0 or higher on the Analytical Writing section of the GRE. Applicants scoring below 146 on the Quantitative section, 156 on the Verbal section, and a 3.5 on the Analytical Writing sections of the GRE will generally not be considered by the Departmental Admissions Committee, except under exceptional circumstances. The program requires that international students complete the Test of English as a Foreign Language (TOEFL) with a minimum score of 600 (250 computer-based, 100 Internet-based).

Admission to this major requires a grade point average (GPA) of better than "B" (3.0 on a 4.0 scale) on the second half of undergraduate coursework and a 3.5 on graduate level work already completed. Three letters of recommendation and the applicant's personal statement are required. Occasional deviations from these standards are allowed for applicants who possess exceptional qualities that are not reflected in these criteria. Because admission is competitive, no particular GRE and GPA guarantees acceptance. All materials must reach the department by January 15th to guarantee consideration for departmental assistantship awards. All admissions application materials should be submitted to the department electronically via the University Admissions application system.

Master's students pursuing the Applied American Politics and Policy major are admitted in the Fall, Spring, or Summer term. Admission to this major requires a 3.0 GPA on the second half of undergraduate work. Applicants must also take the GRE and have official scores submitted prior to being accepted into the program. Target scores for the GRE are a 149 on both the Verbal and Quantitative sections. LSAT scores of 151 or above may be accepted in lieu of GRE scores with permission of the department.

The applicant's statement of goals and interests (approximately 500 words) also is required. No letters of recommendation are required for application to the applied master's degree program. In circumstances where more applications are received than there are available positions in the major program, the department may make its final admissions decisions based on standards above the minimum admissions requirements. All admissions application materials should be submitted to the department electronically via the University Admissions application system.

Placement

Most students in the doctoral program expect to pursue a career as part of a university faculty. The department provides placement services to assist students in obtaining such positions or other employment the student may desire.

With alumni in professional positions on university faculty and in various government and research agencies in over twenty states and several foreign countries, the department is well-represented in the discipline.

Departmental Assistantships

Departmental funding is awarded competitively, not only to provide financial assistance but also to afford outstanding students a structured experience in teaching and research. Such awards are generally granted only to those students who plan to complete their PhD in the department. The strongest appli-

cants may be nominated for college or University funding and will be considered for departmental fellowships. Students can expect departmental funding to continue for up to five years (although it is awarded on a year-by-year basis) given timely progression and success in the academic program and satisfactory performance of assistantship duties. Graduate assistants receive a salary and a tuition waiver for Fall and Spring semesters with Summer stipends awarded separately. Fellowships are usually awarded for the full academic year.

Master's Degree

Students are eligible for either the MS or the MA degree. The requirements for these are governed by University standards and are listed in the "Graduate Degree Requirements" chapter of this *Graduate Bulletin*.

Major in Political Science

The master's program is a general one, intended to develop a broad familiarity with the concepts, methods, and findings of political science. When students do not expect to go on for a PhD, they are encouraged to distribute their coursework over the various fields while focusing their major effort on those areas that fit their career plans. Hours taken outside the department should be used to develop specific professional skills. While the PhD program is considered preparation for a particular profession, the master's program is not so explicitly aimed. It is important that individual students define for themselves what knowledge and skills they expect to develop during their master's work.

A non-thesis master's program includes thirty-three semester hours of coursework, with at least twenty-seven of them on a letter-grade basis. A thesis program comprises thirty semester hours, twenty-four hours of coursework and six thesis hours, with twenty-four total hours on a letter-grade basis. Master's candidates may take up to nine hours outside the department. Up to six semester hours may be transferred from another accredited institution, in accordance with all Graduate School regulations regarding transfer of academic credit.

Students must take one core seminar in two of the department's major fields: American politics, public policy, comparative politics, and international relations. All master's candidates must take six semester hours of methodology. The department's POS 5736 and 5737 are required for those continuing on to a PhD. Those in a terminal master's program may substitute PAD 5700 and 5701 offered in the School of Public Administration and Policy, with permission from the Graduate Director.

Major in Applied American Politics and Policy

Students can also fulfill requirements for a master's degree by undertaking the applied American politics and policy curriculum, designed for students interested in training for careers in political and governmental organizations that relate to public policy and active politics. This is a thirty-six-semester hour non-thesis program, including twenty-four semester hours of coursework and a twelve semester-hour internship or practicum. Twelve of the twenty-four semester hours are in required courses; the remaining twelve semester hours are chosen from a list of approved electives. There is an option of traditional face-to-face or online modes of instruction available.

Additional details on these policies are provided in the Political Science Applied Master's Program Handbook.

Doctoral Degree

The doctoral program in the Department of Political Science is a five-year program designed to provide the highest quality of professional training in the discipline of political science and a mastery of the methods of research. With the advice of the graduate director, students design their own programs of study by selecting two major fields. Up to six semester hours may be transferred from another accredited institution, in accordance with all Graduate School regulations regarding transfer of academic credit.

Coursework requirements typically add up to fifty-seven semester hours: twenty-four total semester hours in two major fields, eighteen semester hours in required methods and research courses, three hours for the research practicum, and twelve semester hours of electives, although waivers of some requirements are possible for students with equivalent prior coursework.

Once students have completed all their coursework requirements (typically in the Spring of their third year), they are eligible to take the doctoral preliminary examinations.

Students are expected to defend their dissertation prospectus in the Fall semester of their fourth year, and to make substantial progress on their dissertations during their fourth and fifth years in the program. Twenty-four semester hours of dissertation work are required. Once the dissertation is completed and accepted by the major professor, it must be defended, in person or with approval via Internet conferencing software, in an oral examination conducted by the dissertation committee. The major professor, University representative,

and all committee members must be present (in person, by telephone, or via Internet conferencing software) to constitute a valid defense. The dissertation must be a significant contribution to knowledge on a topic connected with the student's major field of study. It should reveal the student's capabilities in carrying out original research and should represent a substantial scholarly effort on the part of the student that is of sufficient quality to merit publication by a recognized professional journal or press.

Additional details on these policies are provided in the Political Science Doctoral Program Handbook.

Definition of Prefixes

CPO—Comparative Politics

INR—International Relations

POS—Political Science

PUP—Public Policy

Graduate Courses

Comparative Politics

CPO 5091. Core Seminar in Comparative Government and Politics (3). This core seminar offers a broad survey of the comparative field to familiarize the student with the scope and variety of approaches, theories, methods, and findings associated with comparative politics, including both the classics in the field and the most recent new research directions.

CPO 5127. Seminar in Comparative Government and Politics: Great Britain (3). An investigation and analysis of the major institutions and processes of British government and politics. Comparison and contrast with the political and governmental system of the United States is emphasized.

CPO 5407. Seminar in Comparative Government and Politics: The Middle East (3). Covers the political systems of the Middle East and their social, economic, and cultural foundations.

CPO 5740. Comparative Political Economy (3). This course deals with the interaction between politics and economics (or politicians and economists) in the formulation and implementation of national economic policies. The course is theoretical and empirical in orientation.

CPO 5934r. Selected Topics (3). Varies with instructor and semester. May be repeated to a maximum of nine semester hours.

International Relations

INR 5007. Seminar in International Relations: International Politics (3). A comprehensive survey of hypotheses, models, and theories relating to the analysis of international politics.

INR 5036. International Political Economy (3). Analyzes the basic issues surrounding the interaction of politics and economics in international relations, including arguments that economics determines political outcomes and vice versa, theories regarding the interaction of political policies, and economic policies.

INR 5088. International Conflict (3). Undertakes a comprehensive review of the theory and research on international conflict. A wide range of traditional theories on the causes of war are examined as are a number of topics such as deterrence theory, theories of coercive diplomacy, and the question of the utility of force in the nuclear age.

INR 5507. International Organizations (3). This course examines the formal ways in which countries and other entities attempt to cooperate in the international system. The course includes a theoretical overview of why and how countries cooperate, what organizations and institutions are, and how international law operates. Particular thematic forms of cooperation/organization are also covered, such as international trade and security organizations.

INR 5934r. Selected Topics (3). Varies with instructor and semester. May be repeated to a maximum of nine semester hours.

American Government

POS 5036r. Seminar in American Government and Public Policy: Selected Topics (3). Varies with instructor and semester. May be repeated to a maximum of nine semester hours.

POS 5045. Seminar in American Government and Public Policy: National Government (3). An introduction to the major national, governmental institutions of the United States. Focuses specifically on the presidency, the Congress, the Supreme Court, and the federal bureaucracy by approaching each major institution of national government by looking at the way in which its occupants are selected, at the way in which the institution operates internally, and at its relation with the other major institutions of national government. Serves as the basic introduction to American government for graduate students.

POS 5127. State Government and Politics (3). A comparative analysis of the organization and behavior of major political actors, institutions, and policies in the 50 states. Topics include state constitutions, federalism, political participation, political parties, interest groups, legislatures, courts, governors and administration, and analysis of various policies such as education, welfare, transportation, environmental protection, and civil rights.

POS 5208r. Selected Topics in Political Behavior (3). Varies with instructor and semester. May be repeated to a maximum of nine semester hours.

POS 5227. The Executive (3). This course examines the political powers and exercise of power by chief executives in American government, with particular attention paid to the President and his relations with other branches of government, and state executives.

POS 5237. Seminar in American Government and Public Policy: Public Opinion (3). An introduction to public opinion theory and methodology, with special attention paid to public opinion on policy issues and the role of public opinion in the policy-making process. Practical experience in survey research is provided through the design and execution of a class opinion survey on some policy issue.

POS 5277. Electoral Politics (3). A survey of the research literature on political participation, voting behavior, and the impact of elections on government and policy. Primary emphasis is on recent American politics, but comparative and historical dimensions of electoral politics are explored as well.

POS 5427. Legislative Politics (3). The behavior of legislators and the influences that shape that behavior in the legislative process.

POS 5698r. Selected Topics (3). Varies with instructor and semester. May be repeated to a maximum of nine semester hours.

Methods of Political Analysis

POS 5723r. Game Theory (3). The purpose of this seminar is to survey game theory with a specific emphasis on utilizing those mathematical models to understand political phenomena. Thus, there will be a dual focus on tools and exemplary applications. May be repeated to a maximum of six semester hours.

POS 5727r. Advanced Game Theory (3). Prerequisite: POS 5723 or instructor permission. This course addresses various models of games, including incomplete information, signaling games, bargaining models, repeated games, cheap talk models, evolutionary game theory, and behavioral/experimental game theory. This course assumes some knowledge of calculus and probability and distribution theories. May be repeated to a maximum of six semester hours.

POS 5736r. Research Design (3). Acquaints students with the basic processes involved in the conduct of research. Students are expected to apply these processes in the examination of a research problem of their own design. May be repeated to a maximum of six semester hours.

POS 5737r. Political Science Data Analysis (3). Prerequisite: POS 5736 or instructor permission. Introduction to quantitative data analysis in political science research. Topics include measurement (reliability and validity), univariate and bivariate descriptive statistics, principles of statistical inference, and computing skills. May be repeated to a maximum of six semester hours.

POS 5744. Fundamentals of Political Research (3). This course introduces and/or reviews the mathematical tools underlying most work in quantitative political science, including both statistical and formal modeling techniques. Topics include calculus, probability, linear algebra, and optimization theory.

POS 5746r. Quantitative Analysis in Political Science (3). Prerequisite: POS 5737 or instructor permission. This course introduces students to the theory and practice of likelihood inference for statistical models, as applied to social science data. Models covered in this course include those designed for binary, nominal, ordinal, count and continuous outcome variables. Topics of discussion include likelihood theory, computational issues, estimation and statistical inference, model diagnostics and robustness check, and the interpretation and effective presentation of results. May be repeated to a maximum of six semester hours.

POS 5747r. Advanced Quantitative Analysis in Political Science (3). Prerequisite: POS 5746 or instructor permission. This course introduces PhD students to the theory and practice of likelihood inference for statistical models, as applied to social science data. Models covered in this course include those designed for binary, nominal, ordinal, count, and continuous outcome variables. Topics include likelihood theory, computational issues, estimation and statistical inference, model diagnostics and robustness checks, and the interpretation and effective presentation of results, as well as bootstrapping and multiple imputation.

Public Policy

PUP 5005. Public Policy: Institutions and Processes (3). Survey of theoretical and empirical literature on institutional processes of policy making, from agenda-setting through implementation.

PUP 5006. Policy Implementation and Evaluation (3). Prerequisite: PUP 5005. Discusses the place of implementation in the policy process, the tools and methods available and the difficulties in terms of measuring the effectiveness of public policies and their effect on the political system and the distribution of power in society.

PUP 5007. Models of Public Policy-making (3). An introduction to research on the process of policy-making with an emphasis on the various models used to study public policy.

PUP 5015. Comparative Public Policy (3). This course provides an understanding of the political, economic, and social contexts of policy-making across nations. The course considers relevant theoretical and methodological approaches to cross-national policy research.

PUP 5045. Applied Policy Analysis (3). This course introduces public policy analysis to master's students. Students who successfully complete the course demonstrate that they understand the nature of different policy problems, the tools available to address public policy problems, how to read and produce policy analysis memos, the strength of different types of scientific evidence from which policy decisions are based. The overarching goal is to think about and discuss public policy objectively and analytically, focusing on evaluating the quality of information and assessing our beliefs about the state of reality in light of the quality of evidence available.

PUP 5605. Health Services Organization and Policy (3). This course examines the development of health policy and its practice in American health organizations. Topics include costs, prices, and expenditures, insurance, programs (Medicare, SCHIP, and long-term care), and reforms in the American system.

PUP 5607. Politics of Health Policy (3). Prerequisite: PUP 5605 with a grade of B or higher. This course examines the processes and institutions that make health policy in the United States. Policy analysis is emphasized, with a focus on the current health policy agenda, solution options, and their politics and prospects.

PUP 5932r. Selected Topics (3). Topics vary. May be repeated to a maximum of nine semester hours.

Other

POS 5909r. Directed Individual Study (1-3). May be repeated to a maximum of nine semester hours.

POS 5915. Political Science Research Practicum (3). Prerequisite: POS 5746 or instructor permission. This course gives students experience in conducting political science research. Students will individually design and implement a research project under the supervision of a faculty advisor.

POS 5946r. Teaching Political Science at the College Level (3). Prerequisite: Departmental funding or instructor permission. Provides instruction in teaching responsibilities and techniques, and the special problems and challenges in teaching mainly undergraduate political science courses. Required of all funded graduate assistants and open to other interested graduate students. May be repeated to a maximum of six semester hours.

POS 5971r. Thesis (1-6). (S/U grade only). A minimum of six semester hours of credit is required.

POS 6930r. Profession of Political Science (0-6). (S/U grade only). Students participate in research colloquia and roundtable discussions about the profession of political science presented by faculty, doctoral students, and visiting scholars. May be repeated without limitations.

POS 6960r. Preliminary Examination Preparation (1-12). (S/U grade only). All graduate course requirements must be satisfied before enrolling. May be repeated to a maximum of twelve semester hours.

POS 6980r. Dissertation (1-12). (S/U grade only).

POS 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

POS 8976r. Master's Thesis Defense (0). (P/F grade only.)

POS 8985r. Dissertation Defense (0). (P/F grade only.)

Applied American Politics and Policy

POS 5096. Political Fund-raising (3). This course examines financial rules and laws, organization of fund-raising, event planning, direct marketing, and other topics. The purpose is to provide students with knowledge and skills that will enable them to successfully direct fund-raising efforts.

POS 5203. Fundamentals of Political Management (3). This course is designed to provide basic knowledge about and a common framework for understanding contemporary American politics. Topics include the political system, political industries and underlying political beliefs.

POS 5274. The Campaign Process (3). A theoretical and practical approach to campaign planning and administration for persons seeking relevant active political careers or academic specializations.

POS 5276. Political Communication and Message Development (3). This course introduces students to the specialized forms of communication used by political professionals. Students learn how to produce strategically sound and rhetorically powerful messages for electoral campaigns, policy campaigns, and crisis situations, as well as how to evaluate the message of others.

POS 5335. Political Research (3). This course is designed to prepare students to use research techniques and strategies. Students learn how to understand political situations and how to exploit these situations to the client's advantage. Topics include data resources and collection, statistical analysis and utilization, opposition research, and campaign strategy.

POS 5465. Lobbying (3). This course concentrates on the fundamentals of lobbying, including strategy and tactics. Students learn how to lobby the executive branch and the legislature, state and local governments and foreign governments. The course concentrates on lobbying the budget process, lobbying strategies, and the management of government affairs in corporations and trade associations.

POS 5945r. Professional Practicum/Internship (3–12). This course is designed to provide a structured opportunity for students to gain practical experience in the field of political management. Students spend 300 hours in an activity appropriate for the profession of political management and produce a descriptive and analytical product paper. May be repeated to a maximum of twelve semester hours; majors are required to complete successfully the maximum.

POPULATION:

see Demography; Sociology

PORTUGUESE:

see Modern Languages and Linguistics

PROCESS BIOLOGY:

see Biological Science

PROGRAM EVALUATION:

see Educational Psychology and Learning Systems

PSYCHOBIOLOGY/NEUROSCIENCE

see Biological Science; Neuroscience; Psychology

Graduate Department of PSYCHOLOGY

COLLEGE OF ARTS AND SCIENCES

Website: <http://www.psy.fsu.edu>

Chair: Frank Johnson; **Associate Chair:** Hardy; **Professors:** Boot, Charness, Compton, Contreras, Eckel, Ericsson, Hajcak, Hull, Hyson, F. Johnson, Joiner, Kaschak, Keel, Kelley, Kistner, Lonigan, Maner, McNulty, Patrick, Plant, Rinaman, Schatschneider, Schmidt, Spector, Taylor, Wagner, Wang; **Associate Professors:** Cogle, Ganley, Hart, Kofler, Li, Williams; **Assistant Professors:** Braithwaite, Conway, Dewan, Folstein, Franklin, Hammock, March, Meltzer, Meyer, Nee, Ribeiro, Wilber, Zhang; **Research Faculty:** Sachs-Ericsson; **Teaching Faculty:** Hansen, Hardy, Kemper, Koehler, O. Johnson, Kline, Murphy, Polick, Towne; **Affiliated Faculty:** Flynn, Phillips, Roehrig, Tenenbaum, Wetherby; **Adjunct Instructors:** O'Neal-Moffitt, Sullivan, Wells Harrison; **Professors Emeriti:** Bailey, Baumeister, Berkley, Brigham, Carbonell, Hokanson, Lang, Megargee, Miller, Rashotte, Smith, Stephan, Torgesen, Weaver

The primary goal of graduate study in psychology at Florida State University is to produce scholars with sufficient breadth and depth to permit independent and significant research. While the major emphasis is on the preparation for research, students are also given the necessary background for teaching and/or application of psychological science. Only students whose intentions are to achieve the doctoral degree during full-time study are accepted for the graduate programs in psychology.

Research opportunities are abundant in the Department of Psychology. Faculty members attract a high level of research grant support from federal and state agencies, including the National Institutes of Health and the National Science Foundation. Total grant expenditures on an annual basis currently approximates \$7,500,000.

Information about the Department of Psychology, its graduate programs and faculty is available on our Web site at <http://www.psy.fsu.edu>.

Facilities

The Psychology Department moved into its state-of-the-art building complex in August, 2008. The complex consists of three connecting wings, each four stories tall, and a separate 220-seat auditorium. It features over forty research laboratories, wireless communication, a spacious courtyard, a clinical training and research clinic, a center for studies in reading, a neuroscience research center and state-of-the-art vivarium, and undergraduate and graduate student computer rooms, incorporating the entire department into a single home. Visit our Web site at <http://www.psy.fsu.edu> for more details.

The Department's technical staff and support facilities are some of the best in the country. The facilities are operated by experts in biomedical, electrical, and structural engineering; computer hardware and software support; and graphics design and include fully equipped computer, electronic, machine, graphics, and instrument design shops. Instruction in behavioral, physiological, and neuroanatomical techniques is provided both in formal coursework and in laboratory settings. A molecular neuroscience laboratory provides equipment and training for studies of gene cloning and gene expression, as well as techniques to measure levels of hormones and neurotransmitters.

The department administers an on-campus psychology clinic that offers outpatient assessment and therapy services to members of the Tallahassee community and surrounding areas. This facility provides excellent clinical and research training for clinical students, who render services under close supervision of clinical faculty.

Financial Aid

The Department of Psychology makes every effort to provide financial assistance, including stipends and tuition waivers, to graduate students in good standing in the department. Students who request financial assistance typically receive some kind of support throughout their graduate education. Sources of funding include the following: fellowships, teaching assistantships, research assistantships, departmental assistantships, minority program fellowships, and community agency placements.

Doctoral Programs

The Department of Psychology is organized into five specialized programs for graduate instruction that reflect the mainstream emphases in the field. The programs are in clinical psychology (the assessment, treatment, and study of the determinants of pathological behavior in children and adults with emphasis on biological, cognitive, and environmental factors), cognitive psychology (the study of how humans process complex information received by the senses), developmental psychology (the study of physical, cognitive, and social

change throughout the life span), neuroscience (the study of the biological bases of behavior), and social psychology (the study of how humans think about, influence, and relate to one another).

Clinical Psychology

The PhD program in clinical psychology has been continuously accredited by the American Psychological Association since 1954 (*APA Office of Program Consultation and Accreditation, 750 First Street, NE, Washington, DC 20002-4242, 800-374-2721*). The clinical psychology program is focused on training clinical scientists for academic and research careers. Students interested primarily in clinical practice are not a good match for our program. Based on a clinical science model, the PhD program in Clinical Psychology promotes a scientifically-based approach to understanding, assessing, and ameliorating cognitive, emotional, behavioral, and health problems and seeks to produce students who can contribute to and apply the relevant scientific knowledge. We provide concurrent, integrative training in clinical science and clinical service delivery so that our graduates are prepared not only to apply current knowledge, theories, and techniques, but are able and motivated to remain at the cutting edge of the field.

All students are expected to master the basics of psychology in general and of clinical psychology in particular. This is accomplished primarily through a curriculum of required courses taught by both clinical and non-clinical faculty. We consider students' exposure to our first-rate neuroscience, cognitive, developmental, and social psychology faculty, in addition to our clinical faculty, to be one of our program's strengths. Although there are no formal "tracks," students can pursue specialization beyond the required courses through focused activities in research, advanced coursework, and clinical practice.

The program conforms to a mentorship training model. Students are accepted into the graduate program in part based on the match between their interests and those of our clinical faculty. Since research is a cornerstone of a good clinical science program, students work closely on research with the faculty mentor who recruited them starting in their very first semester. They are further encouraged to be continuously involved in ongoing research throughout their tenure in our program, and it is common for some to pursue collaborations not only with their mentors, but also with other clinical and non-clinical faculty and with fellow graduate students as well.

Our commitment to clinical science leads us to integrate clinical practice and science at every opportunity. We administer our own Psychology Clinic and the Anxiety & Behavioral Health Clinic. These clinics provide state-of-the-science treatment to the community while simultaneously serving as clinical training and research venues for our graduate students and faculty. Our Psychology Clinic has been recognized by APA for Innovative Practices in Graduate Education in Psychology for its accomplishments in integrating training in service and science. Additional clinical training/research opportunities are available at practicum sites in the community. Finally, students complete a required one-year pre-doctoral internship at an APA accredited site. Our students have established a long history of success in competition for preferred internships across the country.

Cognitive Psychology

Cognitive psychology is the study of the mental processes involved in perception, thinking, problem-solving, decision-making, and performance. Florida State's program in cognitive psychology features active research programs in attention, visual processing, cognitive aging, cognitive neuroscience, expert performance, memory, psycholinguistics, reading, and skill acquisition. The goal of our program is to train students to be rigorous scientists, preparing them for careers as researchers in academic settings, government, and private industry.

Graduate students will work closely with one or more faculty during their time at FSU. Students begin developing a research program right away, embarking on a "first year project" during their first semester on campus. Through formal coursework and informal mentorship, students are taught the skills needed to do cutting-edge research in cognitive science.

Our faculty members conduct research on many of the central themes of cognitive science:

What makes an expert? We all find the performances of expert athletes and musicians to be spellbinding. Challenging the idea that high achievers in music, sports, and other such domains are born with special abilities, research within the cognitive area examines how training and deliberate practice leads to the acquisition of mental representation and physiological adaptations that mediate expert-level performance.

How do we understand and navigate complex visual environments? The visual system plays an essential role in our ability to gather information from our environment. Research within the cognitive area uses a combination of

psychophysical and eye-tracking measures to study how we make sense of the visual world, learn and categorize objects, and find the things for which we are looking.

How does the cognitive system change as we age? It is undeniable that our cognitive systems undergo change as we get older. Research within this area aims to understand these changes, and to develop novel ways of using technology to buffer individuals against the natural effects of aging.

How are various perceptual and cognitive processes instantiated in the brain? How does the brain change as we learn, and how is information represented by neural systems? Faculty in the cognitive area use a variety of techniques (EEG, MRI, TMS) to study brain function and structure, and how these relate to cognition.

How do we understand language? The comprehension of language is the keystone against which human experience is built. The cognitive area explores the comprehension process, from the processes involved in extracting information from the written page to the use of our perceptual and motor systems to internally simulate the content of the language. We also use behavioral experiments, eye-tracking, and electrophysiology to explore how language skills develop in children.

How do we learn to read? The development of literacy skills is critical to one's ability to succeed in academic and employment settings. Research within this area aims to understand why some children are more successful learning to read than others, and to understand how best to detect and remediate reading problems when they arise. This research is affiliated with the Florida Center for Reading Research.

How do we remember? The ability to remember, and to gauge how well we will remember something, is key to learning and succeeding in every aspect of our lives. Cognitive area faculty explore the factors that lead some things to be remembered better than others, and that lead people to be more accurate in their assessment of how well they will remember something later.

How do we think and solve problems? The study of thought processes is difficult with traditional methods of data collection, such as recording reaction times, eye-fixations, EEG, and fMRI. Research within the cognitive area examines how one can instruct participants to think aloud and then analyze their verbalizations to identify evidence for strategies, mental representations, and learning processes, which can later be validated by experimental manipulations and tests.

The **Florida Center for Reading Research** (<http://www.fcrr.org>) provides exciting opportunities for basic and applied research in reading. See Developmental Psychology for additional information.

Developmental Psychology

Developmental psychology is the study of the processes by which humans develop and potentially lose competencies in domains ranging from sensation and perception to personality. Developmental psychology as a field of study is growing, as new methods of study have developed, and as the realization that just about any picture of human functioning is but a snapshot of an ongoing process of change. Developmental psychology is an integrative discipline that has implications for other areas of psychology including cognitive psychology, neuroscience, social psychology, and clinical psychology.

Students in developmental psychology receive in-depth training with opportunities for both basic and applied research. The goal of the program is to prepare students for future positions as professors in universities and colleges, researchers in government and private-sector laboratories, and as educators. The program is guided by the view that the best way to become a researcher is to carry out research, so continuous involvement in research projects is stressed. The curriculum has core course requirements but maximizes opportunities for specific seminars and individual research opportunities that fit a training program designed by the student and his or her major professor. Students also are encouraged to develop competencies that will broaden their job prospects beyond the university and research laboratory settings. Examples include program evaluation, test development, and data analysis.

The Developmental Program also has a strong relationship with The Florida Center for Reading Research (<http://www.fcrr.org>), which supports both basic and applied research in reading, and has ongoing studies of reading instruction and assessment in pre-school and elementary aged children as well as adults. The mission of the Center is to contribute both to the basic science of reading and to conduct research and evaluation projects that have policy implications for public schools in Florida. Funds are available for graduate student stipends and post-doctoral fellowships. The director of the Center is Dr. Don Compton. Associate directors are Drs. Richard Wagner, Christopher Lonigan, and Chris Schatschneider.

Social Psychology

The social psychology program involves the scientific examination of how people think about, influence, and relate to each other. The program provides

students with in-depth training in the areas of personality and social psychology, focusing on basic and applied social psychological research. The goal of the program is to prepare students for future positions as researchers and educators. Coursework provides students with an education in a broad range of areas including classic and contemporary issues in social psychology and methodological and statistical approaches to psychological research. In-depth seminars are offered in prejudice and stereotyping, the psychology of intimate relationships, and the self. Graduate students develop further expertise in a specific area or areas of social psychology through hands-on research in collaboration with one or more faculty members in the social program. Students also may have opportunities to collaborate with faculty in the other psychology programs whose interests and expertise are relevant to social psychology.

The broad areas of research interest and expertise of the Social Psychology program's faculty provide several possible directions for interested graduate students to pursue. These broad areas of research include:

Self and Identity: Specific research includes self-control, self-knowledge, accuracy and error in self-judgment, self-deception and defense mechanisms, self-presentation and impression management; how the self operates in social interactions; how people respond to blows to their pride or "threatened egotism," including effects on decision-making and aggression; the "need to belong" as a basic motivation, including what happens when people are rejected or excluded.

Prejudice and Stereotyping: Specific research includes the regulation of prejudice and the prejudice reduction process; the causes and consequences of negative affect and aggression in intergroup interactions; the implications of race for responses to criminal suspects.

Emotion: Specific research includes emotional influences on judgment and decision-making, risk-taking, and social cognition; the self-regulation of emotional states; emotional experiences in the context of social interaction; psychophysiological processes and emotion.

Interpersonal Relationships: Specific research includes examination of factors predicting the maintenance of relationship satisfaction over time, including, but not limited to, attributions, behavior, forgiveness, physical attractiveness, sexual relations, personality, self-esteem, expectations, and intimate partner violence.

Evolutionary Psychology: Specific research includes examination of evolved social cognition in areas such as romantic attraction and long-term relationships and social affiliation and rejection; hormonal processes involved in social behavior.

Interdisciplinary Program in Neuroscience

Students in the doctoral Program in Neuroscience receive broad training in the study of the brain and nervous system function. Areas of emphasis include chemical senses, ingestive behavior, human neuroscience, animal models of cognition, molecular genetics, neurobiology of brain injury and disease, neuroendocrinology, social behavior, stress, and drug addiction. This interdisciplinary program provides a solid foundation with courses covering topics ranging from molecules to behavior. The Program places a heavy emphasis on laboratory research in a collegial and interactive atmosphere. Students may gain experience in the labs of Neuroscience faculty in Psychology, Biological Science, Mathematics, and the College of Medicine. Students work with faculty mentors in exceptionally well-equipped research facilities located in recently constructed buildings. An active colloquium series in neuroscience and special topic symposia/courses bring students into contact with world leaders in the field of neuroscience. In addition, students receive training in a variety of professional skills including public speaking, teaching, and grant writing. Neuroscience is a PhD program, but students may pursue a master's degree in one of the participating departments with the approval of the faculty supervisor and training committee. Detailed information about the Program in Neuroscience and research of the faculty may be found at <http://neuro.fsu.edu>.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Admissions

New students are accepted for enrollment only in the Fall semester of each year. Completed applications are due between December 1st and January 15th, depending on the program. Applicants should visit the department website (<http://www.psy.fsu.edu>) for deadlines.

Applicants must satisfy all admission requirements and policies set by the department and University. Admission to graduate study is based upon a combination of factors, including undergraduate and graduate grade point average, Graduate Record Examination scores, letters of recommendation from former

professors, prior experience, and the applicant's personal statement. Students who have demonstrated an interest in research prior to applying to the doctoral programs will be given priority.

Departmental Degree Requirements

The general requirements of the department are kept to a minimum in order to encourage students to be educated in accordance with each program area's own interests and goals, as well as those of the students. The basic requirements are outlined below; these and other requirements are more completely described in the department's *Graduate Student Handbook*.

Doctoral Program

Incoming students are admitted into one of the five doctoral programs. First-year students work ten hours per week with a faculty member who is conducting research in an area of interest to the student. This collaborative work often evolves into a master's thesis. During the first two years, students complete one advanced statistics course. A basic statistics course is also required if the student has not previously taken an introductory statistics course. Most students are required to complete an empirical thesis and obtain an "in-flight" master's degree en route to completing the doctoral degree. The student's supervisory committee and program area guidelines are used to determine whether a student must complete the master's degree.

Following completion of the master's degree (or bypassing this requirement), students begin their doctoral studies. Students with master's degrees from other institutions begin their doctoral studies after they have completed the advanced statistics course required within the first two years, and after their previous graduate work and empirical theses have been evaluated and approved by the faculty.

The following are required for the doctoral degree:

1. Two of the following core courses: DEP 5165; EXP 5406, 5508; PSB 5341 or PCB 5845; PSB 6048; SOP 5069; and PSY 6919 (Cross-Area Seminar).
2. Completion of the preliminary doctoral-examination requirements for the program area.
3. A dissertation research project.

Program Area Requirements

Program areas have minimum requirements beyond those established for the department; these must be completed prior to the doctoral degree and a time sequence is specified for some requirements. In addition, students work closely with their supervisory committees to develop an optimum combination of coursework, research experience, and applied training to meet their professional goals. Coursework requirements by program area are listed on the following departmental Web site: <https://psy.fsu.edu/php/graduate/students/resources/resources.php>. Program requirements are reviewed periodically by the faculty and may change.

Master's Degree in Applied Behavior Analysis (Panama City Campus)

The Department of Psychology offers a terminal Master of Science (MS) degree in Applied Behavior Analysis (ABA) at the Panama City campus. Graduates of this program are prepared for employment in the public and private sectors as behavior analysts. The program of studies prepares students to sit for the Board Certification exam (BCBA). In contrast to the Tallahassee campus programs described above in which students obtain their master's degree en route to the doctorate, the degree offered at Panama City is a terminal master's and a thesis is not an option. A comprehensive exam is required toward the end of the program. Thirty-nine semester hours of psychology courses are required, including nine semester hours of practicum. A listing of required coursework can be found online at <https://pc.fsu.edu/academics/graduate-programs/ABA/ABA-program>.

For further information about admission and degree requirements for the master's program in Panama City, contact the: *Graduate Office, Department of Psychology, 1107 W. Call Street, Florida State University, Tallahassee, FL 32306-4301; (850)-644-2499; grad-info@psy.fsu.edu*, or visit the Web site at <https://pc.fsu.edu/academics/graduate-programs/ABA/>.

Definition of Prefixes

CLP—Clinical Psychology

DEP—Developmental Psychology

EAB—Experimental Analysis of Behavior

EXP—Experimental Psychology

PCB—Process Biology (Cell/Molecular/Ecology/Genetics/Physiology)

PSB—Psychobiology

PSY—Psychology

SOP—Social Psychology

Graduate Courses

General

PSY 5605. History and Systems of Psychology (3). This course covers the philosophical and scientific antecedents of modern psychology and the history of psychology as an independent scientific discipline.

PSY 6945. Teaching Psychology Practicum (3). Prerequisite: Instructor permission. This course covers substantive issues applicable to the teaching of psychology in the university setting.

Applied Behavior Analysis

EAB 5700. Basic Principles of Behavior (3). Prerequisites: EAB 3703 and EXP 3422 (or equivalents) or instructor permission. This course focuses on the fundamentals of behavior analysis including selecting and defining target behaviors, determining measurement and recording methods, analyzing graphic displays of data, completing a functional analysis and the use of positive reinforcement methods of changing behavior.

EAB 5701. Basic Methods of Applied Behavioral Analysis (3). Prerequisites: EAB 3703 and EXP 3422 (or equivalents) or instructor permission. This course examines behavior analysis methods including stimulus control, shaping, chaining and imitation, along with extinction, differential reinforcement and punishment to decrease behavior. Time out and response are also discussed. Token economies, group contingencies, and behavioral generality are examined.

EAB 5708. Experimental Analysis of Behavior (3). Prerequisites: EAB 3703 and EXP 3422 or equivalents or instructor permission. This course examines basic behavioral processes that allow human and non-human animals to acquire new knowledge and adapt to environmental demands. Students become acquainted with current research findings in the field and learn how research with non-human animals has served as a foundation for the application of behavioral principles across a variety of clinical problems.

EAB 5710. Behavioral Analysis in Developmental Disabilities and Autism (3). Prerequisites: EAB 3703 and EXP 3422 (or equivalents) or instructor permission. This course prepares students to work with developmentally disabled and autistic individuals. Topics include issues in assessment and intervention, improving language capability, preparation for community placement, and the treatment of severe behavior disorders.

EAB 5711. Behavioral Analysis in Mental Health and Aging (3). Prerequisites: EAB 3703 and EXP 3422 (or equivalents) or instructor permission. This course covers two content areas: applications of behavior principles in mental health settings and applications with our aging population. Emphasis is placed on the use of behavioral techniques to teach new skills and maintain existing repertoires. Replacing existing aversive methods of control with positive reinforcement strategies is stressed.

EAB 5721. Behavioral Analysis in Education and Performance Management (3). Prerequisites: EAB 3703 and EXP 3422 (or equivalents) or instructor permission. This course covers two content areas: applications of behavior principles in education and in business and organizational settings. Methods of improving performance using behavioral goals and objectives, performance feedback and reinforcing consequences are stressed.

EAB 5722. Behavior Analysis in Education (3). Prerequisites: EAB 3703 and EXP 3422 or equivalents or instructor permission. This course prepares students to apply research-based behavioral principles in a variety of educational settings.

EAB 5740. Behavior Analysis in Performance Management and Supervision (3). Prerequisites: EAB 3703 and EXP 3422 or equivalents or instructor permission. This course stresses the application of behavioral principles within business, industry, mental health, and Applied Behavior Analysis service-delivery settings. The class provides an overview of contemporary research and practice in the field of Performance Management as well as topics related to research-based strategies for supervising employees in a variety of settings.

EAB 5780. Ethical and Professional Issues in Applied Behavior Analysis (3). Prerequisites: EAB 3703 and EXP 3422 (or equivalents) or instructor permission. This course prepares students for the professional practice of applied behavior analysis. Ethical guidelines are examined, professional issues in consulting with families are discussed, and the role of the behavior analyst as an ethical business and organizational consultant is covered.

EAB 5796. Research Methods in Applied Behavior Analysis (3). Prerequisites: EAB 3703 and EXP 3422 (or equivalents) or instructor permission. This course details practical methods for designing and executing successful behavior analysis research. Reviews current methodology and critiques studies in the literature.

EAB 5940. Applied Behavioral Analysis Practicum (3). (S/U grade only). Prerequisites: EAB 5700, 5701, 5780. This course is a twenty hour per-week supervised practicum in the application of applied behavior analysis.

EAB 5941. Applied Behavioral Analysis Practicum (3). (S/U grade only). Prerequisites: EAB 5700, 5701, 5780. This course is a twenty hour per-week supervised practicum in the application of applied behavior analysis.

EAB 5942. Applied Behavioral Analysis Practicum (3). (S/U grade only). Prerequisites: EAB 5700, 5701, 5780. This course is a twenty hour per-week supervised practicum in the application of applied behavior analysis.

EAB 6130r. Seminar on Skinner's Theory of Behaviorism (3). Prerequisites: EAB 3703 and EXP 3422 (or equivalents) or instructor permission. This course reviews Skinner's theory of behaviorism in depth and addresses its implications for the science of human behavior and contemporary applications in society. May be repeated to a maximum of six semester hours.

Clinical

CLP 5189. Diversity in Individuals and Cultures: Issues for Clinical Psychology (3). Prerequisite: Instructor permission is required for non-clinical psychology students. This course provides a broad examination and investigation of cultural, racial, ethnic, or other individual differences that impact human behavior and the practice of psychology.

CLP 5196. Techniques of Behavioral Change (3). Prerequisites: CLP 6169 and instructor permission. This course examines therapeutic strategies and promising techniques for behavioral change of specific referral problems in clinical practice.

CLP 5375. Research Design and Methods in Clinical Psychology (3). Prerequisite: Instructor permission. This course explores methods, designs, evaluation of treatment outcome and program evaluation research. Ethical and practical considerations of clinical research.

CLP 5436. Personality & Diagnostic Assessment (3). Pre/corequisite: CLP 6169. This course trains graduate students in the clinical psychology doctoral program to complete diagnostic and personality assessments. The first portion of the course focuses on diagnostic interviewing. The second portion focuses on objective personality assessment.

CLP 5475. Child Development and Psychopathology (3). Prerequisite: Instructor permission. This course focuses on the assessment and diagnosis, etiology, and treatment of a number of psychological disorders of childhood in the context of human development.

CLP 5624. Ethics and Standards of Professional Practice (3). (S/U grade only). Prerequisites: CLP 6169; instructor permission. This course is taught to all first-year clinical students during their first summer in residence. It focuses on instruction and practice in interviewing, report writing, and outcome evaluation skills as they apply to clinical work. Also, it serves as the introduction to training in ethical principles in the practice of psychology.

CLP 5941r. Psychology Clinic Practicum (1-3). (S/U grade only). Prerequisites: PSY 5325, CLP 5196 and 6169. This course is a ten hour per week practicum in intake, assessment, and therapy including direct client contact, supervision, and staffing. in the on-campus Psychology Clinic. May be repeated to a maximum of twenty-seven semester hours.

CLP 5942r. Psychology Clinic Advanced Practicum (1-3). (S/U grade only). Prerequisites: PSY 5325, CLP 5196 and 6169. This course is a fifteen hour per week practicum in intake, assessment, and therapy including direct contact with clients who have severe psychopathology, supervision, and staffing in the on-campus Psychology Clinic. May be repeated to a maximum of twenty-four semester hours. A maximum of six credits may be taken in the same semester.

CLP 6169. Adult Development and Psychopathology (3). Prerequisite: Clinical psychology majors only. This course offers theoretical and empirical perspectives on the biological and psychosocial aspects of psychopathology. Includes issues of definition, classification, diagnosis, etiology, as well as treatment implications in the context of human development.

CLP 6920r. Current Issues in Clinical Psychology (1). (S/U grade only). Prerequisite: Clinical psychology majors only. This course consists of weekly lectures on research and professional topics in the field of clinical psychology. May be repeated to a maximum of ten semester hours.

CLP 6945r. Techniques of Clinical Supervision (1-3). (S/U grade only). Prerequisite: CLP 5941 (must have completed six semesters). The purpose of this course is to provide clinical psychology graduate students with a variety of supervised experiences that will enhance their developing skills and competencies with respect to supervising trainee's clinical work. This course and practicum were designed in accordance with the Consensus Statement on Competencies in Clinical Supervision (Falender et al., 2004). It includes coursework, readings, and didactics in supervision knowledge and skills, as well as "supervision of supervision" that includes live observation and review of written feedback from peer supervisor to trainee, with critical feedback.

PSY 5325. Cognitive Assessment (3). Prerequisites: CLP 6169 and instructor permission. This course and associated lab provide instruction and practice in developing foundational competencies in the administration, scoring, and interpretation of individual cognitive, intellectual, and academic tests.

PSY 6940r. External Placement Practicum (1-6). (S/U grade only). Prerequisite: PSY 5325, CLP 5196 and 6169. This course provides supervised experience in psychological assessment, therapy, and/or consultation in a community setting. May be repeated to a maximum of twenty-four semester hours.

PSY 6948r. Psychology Internship (1-9). (S/U grade only). Prerequisite: Clinical psychology majors only. This course is an off-campus internship for one year, two thousand hours. May be repeated to a maximum of twenty-seven semester hours.

Human Learning and Cognition

EXP 5508. Cognition and Perception (3). This course is a survey of contemporary issues in sensation, perception, attention, and memory.

EXP 5642. Psychology of Language (3). Prerequisite: Instructor permission. This course focuses on the processes involved in language (e.g., speech recognition, comprehension, reading, and conversation). The biological foundations of language and the relationship between language and thought also are discussed.

EXP 6609r. Seminar in Higher Mental Processes (3). This course focuses on current scientific knowledge in areas of human intellectual functioning: perception, attention, memory, language, and reasoning. May be repeated to a maximum of eighteen semester hours.

EXP 6920r. Issues in Cognitive Science (1). (S/U grade only). Pre- or corequisites: EXP 5508; Cognitive psychology majors only. This course aims to familiarize graduate students with current issues in cognitive science and to prepare students to be able to present ongoing research at the level expected for presentations at national and international conferences. May be repeated to a maximum of ten semester hours.

Life-Span Development

DEP 5165. Developmental Psychology (3). Prerequisite: Instructor permission. This course covers the development of children's cognitive and social behavior from infancy to the beginning of adolescence.

DEP 6117r. Issues in Developmental Psychology (1). (S/U grade only.) This course provides professional development opportunities to graduate students interested in developmental psychology.

Psychobiology/Neuroscience

EXP 5406. Neurobiology of Learning and Memory (3). This course is a survey of contemporary issues in animal learning, including the neurobiological underpinnings of learning and memory. Concentrates on methods, data, and theory in areas of classical conditioning and instrumental training.

EXP 5717. Animal Psychophysics (3). This course studies sensory processes in animals using rigorous behavioral techniques.

PCB 5845. Cell and Molecular Neuroscience (4). This course introduces students to basic principles of neurophysiology, including intracellular signaling, membrane potentials, synaptic communication, sensory and motor systems, and neural development and plasticity.

PSB 5056. Biological Psychology (3). This course studies the principles and methods of phylogenetic, genetic, and neurophysical approaches to behavior.

PSB 5057. Neuroscience Methods: Molecules to Behavior (2). This course exposes graduate students to a broad array of current techniques and methodologies in the neurosciences from a molecular to behavioral level of analysis.

PSB 5077. Responsible Conduct of Research (2). (S/U grade only). This course is an introduction to survival skills and ethics in scientific research. The focus is on basic principles of scientific conduct and practice for graduate students pursuing careers in biomedical research.

PSB 5230C. Vertebrate Neuroanatomy (4). Prerequisites: PCB 5845 or instructor permission. Corequisites: PSB 5341 or instructor permission. This course gives beginning graduate students a foundation in neuroanatomy, which aids in understanding and conducting neuroscience research. Focus is on (1) the 3-D anatomy of the brain and spinal cord in sheep, humans, and rodents, (2) the location of selected subregions, and (3) the fine structure (neuronal morphology and connections) of selected brain regions. Also included to a limited extent is neuroanatomy of other species (e.g. birds), neurotransmitter systems, principles of stereotaxic surgery, and evidence of function from experimental and clinical neuroanatomy. A sheep brain lab accompanies the course.

PSB 5341. Systems and Behavioral Neuroscience (3). This course covers integrated neural systems that ultimately lead to the behavior of organisms. Topics include fluid and energy balance, reproduction, sleep, emotions, cognition and neurological disorders.

PSB 6048. Affective Neuroscience (3). This course covers fundamental concepts regarding the neuroscience of emotion and emotion-cognition interactions. The course also provides an introduction to the current knowledge of the neural mechanisms underlying human thinking and behavior, and the primary methodology used in this field.

PSB 6059r. Seminar in Physiological Psychology (3). This course consists of topical seminars in physiological psychology, varying as to offering faculty. May be repeated to a maximum of nine semester hours.

PSB 6070r. Current Problems in Neuroscience (2). (S/U grade only). This course is a detailed examination of a current area of neuroscience research. May be repeated to a maximum of eight semester hours.

PSB 6920r. Neuroscience Colloquium (1). (S/U grade only). This course consists of lectures and discussions on research in neuroscience. May be repeated to maximum of ten semester hours.

PSB 6933r. Seminar in Neuroscience (1–2). (S/U grade only). This course provides a research oriented seminar for graduate students in neuroscience. Content includes a wide variety of current topics in nervous system research. May be repeated to a maximum of twenty-four semester hours.

Social-Personality

SOP 5069. Personality and Social Psychology (3). This course is a survey of the content areas in social and personality psychology. The primary goals of the course are to acquaint students with the major topics, issues, and methods used in these fields and the importance of considering the joint influence of the person and situation on behavior.

SOP 6920r. Current Issues in Social Psychology (1). (S/U grade only). Prerequisite: Social psychology majors only. This course consists of weekly lectures and discussions on research in the study of social psychology. Students present original research. May be repeated to a maximum of ten semester hours.

SOP 6939r. Seminar in Social Psychology (3). This course consists of topical seminars in social psychology that vary according to offering faculty. May be repeated to a maximum of eighteen semester hours.

Multiple Area Courses

PSY 5900r. Individual Research Study (3–9). Prerequisite: Instructor permission. This course consists of supervised individual research study on a selected topic by a directing professor. Participation includes active participation in research and a written product, the nature of which is to be detailed in a written contract between professor and student. May be repeated to a maximum of thirty-six semester hours.

PSY 5908r. Directed Individual Study (1–12). (S/U grade only). This course consists of a supervised individual study project on a selected topic. May be repeated to a maximum of fifty semester hours.

PSY 5916r. Selected Research Topics (3). This course covers a specialized research area presented by a faculty member in his/her major research area. May be repeated to a maximum of thirty semester hours.

PSY 5917r. Supervised Research (1–5). (S/U grade only). This course consists of a ten hour per week research apprenticeship under the direction of a research professor. No more than three semester hours may be counted toward the master's degree and five semester hours toward the doctoral degree.

PSY 5947r. Supervised Teaching (1–5). (S/U grade only). This course consists of a teaching apprenticeship under the direction of a faculty member, involves observed teaching and teacher observation. No more than three semester hours may be counted toward the master's degree and five semester hours toward the doctoral degree.

PSY 5973r. Thesis (1–6). (S/U grade only). This course consists of supervised research on an original research project submitted in partial fulfillment of master's degree requirements. A minimum of six semester hours of credit is required for the master's degree.

PSY 6656r. Preliminary Examination Preparation (1–9). (S/U grade only). This course serves as preparation for a theoretical paper, including complete literature review, critique, and future projection, or a written preliminary examination, including fundamental substantive areas and methodological and theoretical issues. A minimum of three semester hours is required. May be repeated to a maximum of forty-four semester hours.

PSY 6919r. Seminar in Current Research Topics (1–3). Students may register for a maximum of two sections within the same semester. May be repeated to a maximum of thirty-six semester hours.

PSY 6980r. Dissertation (1–12). (S/U grade only). This course consists of supervised research on an original research project submitted in partial fulfillment of doctoral degree requirements. A minimum of twenty-four semester hours of credit is required for the doctoral degree.

PSY 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

PSY 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

PSY 8976r. Master's Thesis Defense (0). (P/F grade only.)

PSY 8985r. Dissertation Defense (0). (P/F grade only.)

**PSYCHOLOGY FOR COUNSELING:
see Educational Psychology and Learning Systems**

Reubin O' D. Askew School of PUBLIC ADMINISTRATION AND POLICY

Graduate Programs

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <https://coss.fsu.edu/askew/>

Director: Keon Hyung-Lee; **Professors:** Berry, Brower, Feiock, Lee, Reid, VanLandingham, Yang; **Assistant Professors:** Berlan, Campos, Fay, Tang, Wright; **Visiting Professors and Adjunct Faculty:** Banner, Dilling, Duggleby, Ferreros, Gleason, Grant, Heffron-Casserleigh, Lavin, Long, McDaniel, Merrick, Skillman, Smith; **Professors Emeriti:** Bowman, Chackerian, deHaven-Smith, Grizzle, Klay

Graduate professional study in public administration prepares students for a wide variety of careers in management and policy analysis. Graduates work in such settings as government agencies, legislatures, courts, domestic not-for-profit organizations, international nongovernmental organizations (NGOs), and in numerous for-profit businesses that work closely with governments. Several empirical studies, the most recent in 2014, have ranked the Askew School faculty in the top ten nationally and top twenty globally in frequency of publishing in the top journals of the field.

The Askew School offers two graduate degree programs: the Master of Public Administration (MPA) and the Doctor of Philosophy (PhD) in Public Administration. The fully accredited MPA program prepares students to become managers and policy analysts. The doctorate is a research degree designed to prepare students for college and university teaching, advanced research in policy and management, and the highest levels of administrative practice. Qualified advanced undergraduate students may begin graduate studies in public administration that count toward both their undergraduate degrees and the professional MPA degree. The school also offers joint graduate pathways with the College of Law (Master of Public Administration/Juris Doctor [MPA/JD]), the College of Social Work (Master of Public Administration/Master of Social Work [MPA/MSW]), the College of Criminology and Criminal Justice (Master of Public Administration/Master of Science in Criminology [MPA/MSC]), and the Department of Urban and Regional Planning (Master of Public Administration/Master of Science in Planning [MPA/MSP]). Certificates in financial management, general public administration, emergency management, application of unmanned aircraft systems, U.S. intelligence studies, civic and nonprofit leadership, and Florida city and county management are also available. Additional information is available on the Askew School's website: <https://coss.fsu.edu/askew/>.

Combined BA or BS and Master of Public Administration (MPA) Pathway

Qualified students in any undergraduate major may use up to twelve hours of free electives to take graduate courses in public administration that will count for completion of both the bachelor's degree and the professional MPA degree. Completion of graduate courses through the combined bachelor's/master's pathway will also count for completion of an undergraduate minor in public administration. Qualified undergraduates who take public administration courses to satisfy major requirements in the bachelor's degree programs in either political science or interdisciplinary social science may take up to twelve hours of graduate credit that will be counted for completion of both their bachelor's degree major and the MPA degree. In addition, undergraduate students who take the PAD 3941 Public Service Internship course may waive the graduate internship course requirement. Normally, for inexperienced students, the MPA degree requires completion of forty-five graduate credit hours following receipt of a bachelor's degree. Students in the Combined Bachelor's/Master's Pathway who complete twelve graduate credits and an undergraduate internship prior to receipt of their bachelor's degree will only need to complete thirty additional graduate credits to receive the MPA degree.

Acceptance to this pre-graduate program is competitive. Applications will only be considered from undergraduates who are entering their senior year, or who are honor students with junior status, and who have a cumulative undergraduate grade point average of at least 3.2 in all prior studies at FSU. Application forms are to be submitted to the School's academic program specialist. Accepted undergraduates may then enroll for up to twelve hours in courses that are either core or elective courses in the MPA program. Students accepted to the pre-graduate program should subsequently make formal application for admission to the graduate school during their senior year. Acceptance and successful completion of the pre-graduate program does not guarantee admission into the graduate MPA program.

For more information, refer to the Askew School's website at <https://coss.fsu.edu/askew/>.

Master of Public Administration (MPA)

The MPA is a professional degree designed to prepare students for professional and managerial positions as administrators and policy analysts in government, consulting, and nonprofit organizations. Equal emphasis is placed upon meeting the needs of in-service and pre-service students, and classes for the degree are offered primarily during the evening, on weekends, and online.

A candidate may be admitted to the program by meeting University requirements for graduate study and by submitting three letters of recommendation, official transcripts from all universities attended, a personal statement, a résumé, and where relevant, evidence of prior professional work experience. A small number of exceptions to the University admission standards are possible for students possessing exceptional qualifications not reflected in criteria normally used for admission. The GRE is the preferred standardized exam for application to graduate study, however, other graduate admission standardized exams may be accepted as well. For more information, please contact the school. Applicants that meet certain specified criteria may be eligible to request a waiver of the entrance exam. For further information concerning admission exceptions, consult either the *MPA Student Handbook* (available online or from the school) or the MPA Director.

The MPA requires successful completion of forty-five (45) semester hours. Those students with at least one year of acceptable professional experience will be able to waive the, otherwise required, internship course (3 credit hours). Included in the requirements are five substantive core courses, two methods courses, an action report on a significant administrative problem, an internship course, and eighteen (18) hours of elective coursework arranged in consultation with a faculty advisor.

MPA Core Course Requirements

- Substantive Core Courses** (fifteen semester hours):
 - PAD 5035** Policy Development and Administration (3)
 - PAD 5050** The Profession of Public Administration (3)
 - PAD 5106** Public Organizations (3)
 - PAD 5227** Managing Public Financial Resources (3)
 - PAD 5417** Human Resource Management (3)
- Methodological Courses** (six semester hours):
 - PAD 5700** Research Design in Public Administration (3)
 - PAD 5701** Quantitative Analysis in Public Administration (3)
- Internship and Action Report** (three to six semester hours):
 - PAD 5946** Public Service Internship (3)
 - PAD 6908** Action Report (3)

Professional Option: elective work in many areas is possible as long as it leads to a coherent program of study; however, inexperienced students are strongly encouraged to consider one of the following school-sponsored options:

- Local government management
- Leadership and strategic management
- Public financial management
- Evidence-based policymaking
- Health policy substantive courses
- Emergency management and homeland security
- Managing nonprofit organizations
- International and non-governmental organizations

These programs are more fully described in the *MPA Student Handbook*.

Graduate Certificates

The certificate programs are designed to accommodate the special needs of practicing administrators and working students. There is no minimum number of courses to be taken in any term and no limit on the amount of time one takes to complete a certificate, unless otherwise noted. Continuous registration is not required. Although a "C" grade or better is accepted for credit, all graduate certificates require a 3.0 grade point average. All certificate coursework must be completed at Florida State University. Transfer credits may not count towards the certificate program. All courses in the certificate program must be letter graded. Pass/Fail (S/U) grades will not count towards the certificate. Students must apply for admission to the certificate program they wish to pursue. This application must be submitted as early as possible, but no later than before the student has completed six (6) credit hours of courses in the certificate program.

The certificates are also available to MPA students as a part of their degree coursework and courses may count toward both the degree electives and the certificate.

Certificate in Emergency Management and Homeland Security

The graduate Certificate in Emergency Management and Homeland Security includes a variety of skill and knowledge concentrations appropriate for practicing managers and others interested in the field. To earn the certificate, two required courses and three additional ones selected from those offered by the Askew School or the Urban and Regional Planning department must be completed. The graduate Certificate in Emergency Management and Homeland Security is fifteen (15) credit hours total. A grade of "C" or higher must be earned in all certificate courses.

Required Courses

- PAD 5397** Foundations of Emergency Management (3)
PAD 5398 Emergency Management Programs, Planning and Policy (3)

Elective Courses

- PAD 5373** Leadership and Communication in Emergency Management (3)
PAD 5376 Introduction to Terrorism: Preparedness and Response (3)
PAD 5377 Advanced Topics in Terrorism (3)
PAD 5378 Disaster Systems (3)
PAD 5388 Disaster Recovery and Mitigation (3)
PAD 5828 NGOs and Disasters (3)
PAD 5835 International and Comparative Disaster Management (3)
PAD 5839 International Conflicts and Terrorism (3)
PAD 5838 Terrorism and Security in Africa (3)
PAD 5845 Public Health and Emergency Management (3)
PAD 5895 Homeland Security Policy and Practice (3)
PAD 5388 Disaster Dollars: The Financing of Emergency Management Recovery (3)
PAD 5079 Unmanned Aircraft Systems in Emergency Management (3)
PAD 5837 International Terrorism Policy (3)
PAD 5310 Disaster Management Planning for Urban Poor Communities (3)
PAD 5389 Disasters: From Shock to Recovery (3)
PAD 5848 U.S. Intelligence Community (3)
PAD 5898 Global Security and Fusion (3)
PAD 5849 U.S. Intelligence Policy (3)
PAD 5896 U.S. Intelligence Analysis and Communication (3)
PAD 5475 Women, Disasters and Conflict (3)
PAD 5935r Seminar in Public Administration: Selected Topics (1-3) [in emergency management; repeatable]
URP 5445 Global Climate Change and Resilience

Certificate in Application of Unmanned Aircraft Systems

The graduate Certificate in Application of Unmanned Aircraft Systems provides students with practical 'hands on' usage of the technology as well as the regulatory frameworks, requirements, and realities of using this data in a variety of fields. To earn the certificate, three required courses and two additional ones selected from those offered by the Askew School and the Geography, Urban and Regional Planning, and Geology departments must be completed. The graduate Certificate in Application of Unmanned Aircraft Systems is fifteen (15) credit hours total. A grade of "C" or higher must be earned in all certificate courses.

Required Courses

- PAD 5079** Unmanned Aircraft Systems in Emergency Management (3)
PAD 5078 Application on Unmanned Aircraft Systems (3)
PAD 5935 Policy and Implementation of Unmanned Aircraft Systems (3)

Elective Courses

- PAD 5397** Foundations of Emergency Management (3)
PAD 5378 Disaster Systems (3)
GEO 5414 Geospatial Data and Analysis (3)
GEO 5377 Natural Resource Assessment and Analysis (3)
GIS 5034 Introduction to Remote Sensing (3)
GIS 5010 Geographic Information Systems (3)
GIS 5400 GIS Applications for Social Sciences (3)
PAD 5848 U.S. Intelligence Community (3)

- URP 5101** Planning Theory and Practice (3)
URP 5429 Planning for and Mitigating Global Climate Change (3)

Certificate in U.S. Intelligence Studies

The graduate Certificate in U.S. Intelligence Studies gives students in just about any program of study a way to stand out from the crowd and learn real world approaches to solving complicated problems. The concepts and methods are as relevant in business, psychology, and the arts as they are to national security. To earn the certificate, two required courses and three additional ones selected from those offered by the Askew School and the Religion, International Affairs, and Political Science departments must be completed. The graduate Certificate in U.S. Intelligence Studies is fifteen (15) credit hours total. A grade of "C" or higher must be earned in all certificate courses.

Required Courses

- PAD 5849** U.S. Intelligence Policy (3)
PAD 5896 U.S. Intelligence Analysis and Communication (3)

Elective Courses

- PAD 5848** U.S. Intelligence Community (3)
PAD 5599 The Spy Lit Review (3)
PAD 5895 Homeland Security Policy and Practice (3)
PAD 5839 Global Security and Fusion (3)
PAD 5376 Introduction to Terrorism (3)
PAD 5377 Advanced Topics in Terrorism (3)
PAD 5935 International Conflict and Terrorism (3)
PAD 5837 International Terror Policy (3)
PAD 5838 Terrorism and Security in Africa (3)
RLG 5195 Ethics of Torture (3)
RLG 5397 Torture and Human Rights (3)
RLG 6176 Law and Ethics of Torture (3)
INR 5507 International Organizations (3)
INR 5935 National Security Transformation (3)
INR 5936 National Security Issues (3)
INR 5935 Human Rights and National Security Law (3)
INR 5036 International Political Economy (3)
CPO 5934 Politics of Terror (3)
POS 5723 Game Theory (3)
POS 5727 Advanced Game Theory (3)

Regional Specialization: Eastern Europe, the former Soviet Union, and Russia

- CPO 5934** Conflict in Balkans (3)
HIS 6934 Seminar: U.S. and Cold War (3)
EUH 5578 19th Century Russia (3)
RUW 5930 Zizek's Politics (3)
RUW 5930 Nationalism in Eastern Europe (3)
RUW 5930 Critical Approaches to Nabokov (3)
RUW 5930 Russian Culture and Civilization (3)
ASH 5266 Central Asia since the Mongols (3)
RUS 4XXX 4000-level Russian language course (3)

Regional Specialization: Middle East

- INR 5936** Political Econ of Middle East (3)
HIS 6934 Seminar: Minorities in the Middle East (3)
HIS 6934 Islamic Theology, Philosophy and Law (3)
RLG 5305 Islamic Theology, Philosophy and Law (3)
RLG 5368 Islam in North America (3)
RLG 6596 Islamic Law and Society (3)
FRE 5900 Islam and Identity (3)
CPO 5407 Seminar in Comparative Government and Politics: The Middle East (3)
ARA 4XXX 4000-level Arabic language course (3)

Regional Specialization: East Asia, specifically China

- ASN 5935** Modern China (3)
INR 5936 Communist China (3)
INR 5936 History of Asia (3)

- HIS 5935** U.S. & East Asia 1850 to Present (3)
RLG 5332 Modern Hinduism (3)
RLG 5354 Chinese Religion (3)
CHI 4XXX 4000-level Chinese language course (3)

Other regional specializations may be permitted with program director approval. Each admitted student will develop a course of study covering all requirements. This course of study will be approved by the certificate program director or associate director prior to the student beginning coursework. Any changes to the course of study must be approved by the certificate program director or associate director.

Financial Management Certificate

Topics covered in this program conform to those recommended by the Association for Budgeting and Financial Management of the American Society for Public Administration. To obtain the certificate, students complete two required courses and four additional courses selected from a list of courses offered through the Reubin O'D. Askew School of Public Administration and Policy, Accounting, Economics, and Urban and Regional Planning departments. The graduate Certificate in Financial Management is eighteen (18) credit hours total. A grade of "C" or higher must be earned in all certificate courses.

Required Courses

- PAD 5227** Managing Public Financial Resources (3)
PAD 6207 Financial Resources Administration (3)

Elective Courses

- ACG 5505** Government and Not-for-Profit Accounting and Auditing (3)
ECO 5505 Public Finance (3)
PAD 5041 Public Service Ethics (3)
PAD 5327 Public Program Evaluation (3)
PAD 5859 Managing Public Procurement (3)
PAD 5935r Seminar in Public Administration: Selected Topics (1-3)
 [Public Finance (3)]
PAD 6226 Public Budgeting Simulation and Issues (3)
PAD 6721 Policy Analysis Research Seminar (3)
URP 5261 Forecasting for Plan Development (3)
URP 5731 Planning of Community Infrastructure (3)

Skills concentrations covered in this curriculum include accounting and auditing (government financial accounting and reporting, financial and performance auditing), budgeting (processes, preparation, approaches, analytic techniques, forecasting), financial management decision making (cost-benefit, cost-effectiveness, and cost-revenue analysis; managing public procurement; fiscal impact analysis; financial condition evaluation), revenues (taxation from both administrative and public finance perspectives, intergovernmental finance, user charges), long-term financial decision making (capital planning process, capital investment analysis, alternative financing sources, debt management), and financial modeling.

Certificate in Florida City and County Management

This program includes skills and knowledge appropriate for practicing managers and all those interested in Florida City and County Management. The certificate requires twelve credit hours of graduate course credit in public administration. To obtain the certificate, students complete one required course and three additional courses selected from a list of courses offered through the Reubin O'D. Askew School of Public Administration and Policy. It is taught in partnership with the Center for Florida Local Government Excellence. The graduate Certificate in Florida City and County Management is twelve (12) credit hours total. A grade of "C" or higher must be earned in all certificate courses.

Required Course

- PAD 5935r** Seminar in Public Administration: Selected Topics (1-3)
 [Local Government Administration (3)]

Elective Courses

- PAD 5335** Strategic Leadership for Communities (3)
PAD 5397 Foundations of Emergency Management (3)
PAD 5826 Intergovernmental Management and Relations (3)
PAD 6136 Seminar: Management Studies in Government (3)
PAD 6207 Financial Resources Administration (3)
PAD 6226 Public Budgeting Simulation and Issues (3)
PAD 6300 Governmental Administration in Florida (3)

Civic and Nonprofit Leadership Certificate

This certificate is designed primarily for those who already hold or wish to assume nonprofit leadership roles; it will also be of interest to those in government agencies or private businesses that deal extensively with nonprofits. The nonprofit certificate emphasizes the distinctive features of nonprofit organizations and provides management skills and knowledge that are helpful specifically for civic and nonprofit leaders. This certificate program should help students diagnose the context and dynamics faced by the civic and nonprofit sector and individual nonprofit organizations; apply appropriate strategies for the management of nonprofits aimed at changing internal dynamics and/or influencing the external environment; engage actively with the local, national, and/or international civic and nonprofit community; demonstrate an understanding of, appreciation for, and willingness to challenge the values and unique character of the civic and nonprofit sector; and demonstrate an ability to apply critical tools for civic and nonprofit management, including skill and knowledge sets such as strategic planning, program evaluation, fundraising, financial management, and information management. To earn the certificate, two required courses, two certificate optional courses, two additional elective courses from the list below, and a capstone essay must be completed. The graduate Certificate in Civic and Nonprofit Leadership is eighteen (18) credit hours total. A grade of "C" or higher must be earned in all certificate courses. All coursework in this Certificate is subject to the seven-year recency of work rule.

Required Courses

- PAD 5142** Managing the Nonprofit Organization (3)
PAD 5174 The Independent Sector (3)
PAD 6908 Action Report (3) OR Capstone Essay (0)*

Certificate Optional Electives

- PAD 5173** Nongovernmental Organizations (3)
PAD 5208 Budget and Finance in Nonprofit Organizations (3)
PAD 5335 Strategic Leadership for Communities (3)
PAD 5206 Fundraising and Fund Development (3)
PAD 5946 Public Service Internship (3)**

Certificate Recommended Electives

- PAD 5041** Public Service Ethics (3)
PAD 5327 Public Program Evaluation (3)
PAD 5397 Foundations of Emergency Management (3)
PAD 5417 Human Resource Management (3)
PAD 5826 Intergovernmental Management and Relations (3)
PAD 5828 Nonprofits, Nongovernmental Organizations, and Disasters (3)
PAD 5859 Managing Public Procurement (3)
ACG 5505 Government and Not-for-Profit Accounting and Auditing (3)***
ARE 5665 Leading the Arts Organization (3)
ARE 5865 Cultural Policy (3)
ARE 5930 Grant Writing for Arts Organizations (3)
MAR 5816 Marketing Strategy (3)***
POS 5465 Lobbying (3)
SOW 5235 Social Welfare Policies and Services (3)
SOW 5282 Legislative Advocacy (3)***
SOW 5455 Grant Writing and Grant Management (3)
URP 5122 Planning Dispute Resolution (3)
URP 5743 Neighborhood Planning (3)

Note: This is not an exhaustive list. Other courses in specialized fields such as arts administration, emergency management, social work, history archives management, or communication may be included as approved by the advisor.

* A capstone essay that combines knowledge gained through the program and the student's unique topical interests is to be prepared at the culmination of the program of study. The essay can be accomplished in one of three ways. The first alternative is a non-credit essay on a topic chosen jointly by the student and faculty advisor and evaluated by one or more of the faculty. The second alternative is an Action Report (PAD 6908) prepared for the MPA degree that focuses on some aspect of nonprofit management or the nonprofit sector. If this alternative is undertaken, it must be in addition to the other 18 credits required for the certificate. The third alternative is an assigned final paper that satisfies the requirements of one of the courses in the program of study. The paper in the third alternative must be approved both by the instructor for the course and the student's advisor.

** The internship, with a nonprofit focus, must be satisfactorily completed by all students who do not already possess the equivalent of at least one year of prior professional nonprofit experience. With advisor permission, students may substitute a nonprofit-focused internship in another program such as Arts Administration or Social Work.

*** These courses may require prerequisites or instructor permission.

General Public Administration Certificate

The school offers an executive development program which leads to a Certificate in Public Administration. Typically, participants are public administrators who hold bachelor's degrees but who have not yet entered a graduate degree program. Applicants register as non-degree students in a simplified process which does not require formal admission to graduate studies. Up to twelve (12) hours of credit earned with a "B" grade or better in this program may later be applied to the MPA upon admission to that program.

The certificate requires eighteen (18) credit hours (six courses) of graduate course credit in public administration. Three courses, or nine (9) credit hours, must be from the MPA substantive core and the remainder from electives and other courses in public administration. A grade of "C" or higher must be earned in all certificate courses. One course from a related field outside the school may be applied to satisfy certificate requirements. This course must be approved in advance by the program director.

Substantive Core Courses

- PAD 5050 The Profession of Public Administration (3)
- PAD 5106 Public Organizations (3)
- PAD 5227 Public Financial Management (3)
- PAD 5417 Human Resource Management (3)
- PAD 5035 Policy Development and Administration (3)
- PAD 5700 Research Design in Public Administration (3)
- PAD 5701 Quantitative Analysis in Public Administration (3)

Doctor of Philosophy

The PhD in public administration is designed to provide the highest level of professional education in public administration theory and methods. Its aim is to prepare persons for advanced research and administration. In their careers, graduates should be able to move freely through academic, governmental, consulting, and research organizations. PhD applicants must meet the following admission standards: 1) a minimum GRE score of at least 153 on the Verbal and 144 on the Quantitative is preferred, except under exceptional circumstances. 2) 3.0 or better undergraduate grade point average; and 3) 3.5 or better graduate grade point average.

Higher attainment on one measure may offset lower attainment on another. Professional experience is valued, but academic performance will receive primary emphasis. Letters of recommendation are required. All applicants are required to take the GRE. A candidate may be admitted to the program by meeting the University requirements for graduate study as well as the requirements stated above and by submitting three letters of recommendation, official transcripts from all universities attended, a statement of purpose, a résumé, and a writing sample. Official GRE scores and English Language Proficiency scores (if applicable) are also required.

To be eligible to take the preliminary examination and be admitted to PhD candidacy, the student must complete forty-five to seventy-five semester hours in the following areas:

Course Requirements

Those who enter the PhD program without a Master of Public Administration or equivalent degree must satisfy the requirements of part of the MPA core curriculum before proceeding to doctoral courses. The course requirements are specified below. Such students should consult with their Major Professor or the PhD director to determine what MPA core courses they should take. Newly admitted students who are unsure of their readiness for doctoral level statistics, regardless of whether they hold an MPA or not, are advised to take PAD 5701 as a refresher course before advancing to PAD 6705.

The Master of Public Administration Requirements

- PAD 5227 Public Financial Management (3)
- PAD 5417 Human Resource Management (3)
- PAD 5700 Research Design in Public Administration (3)
- PAD 5701 Quantitative Analysis in Public Administration (3)

PhD Core

Those who enter the program with an MPA degree, or those who have completed the 12 credit hours described above, will proceed to the following courses.

Twenty-four semester hours of the following:

Substantive Courses

Twelve semester hours:

- PAD 6025 Theoretical Perspectives in Public Policy (3)
- PAD 6054 Intellectual History and Future of Public Administration (3)
- PAD 6102 Administrative Behavior in Public Organizations (3)
- PAD 6109 Institutions and Society (3)

Methodology Courses

Twelve semester hours:

- PAD 6705 Analytic Techniques for Public Administrators (3)
- PAD 6707 Logics of Inquiry (3)

AND

Methods Electives (six semester hours)

Specialization in Public Administration

Doctoral specializations are individually tailored. It is possible to emphasize any of the Askew School's strengths in such areas as policy analysis, nonprofits, networks and intergovernmental/intersectoral relations, research methods, emergency management, financial management, organization behavior, human resource management, or substantive policy studies in several policy areas. Eighteen semester hours specializing in one of the following fields of public administration are required:

- Public Management
- Public Policy
- Institutions and Governance

Political Processes

Three (3) semester hours are required. Students should take PAD 6721, Political Analysis Research Seminar, to satisfy the political processes requirement.

Courses

All courses in the PhD core requirements must be taken in the school. Students may be required to pass a methods proficiency examination covering the material in the MPA-methods core before they can enroll in PAD 6705, Analytic Techniques for Public Administrators. Interdisciplinary specializations related to student career goals are also possible.

Diagnostic Review

The school's PhD committee will examine the performance of each student after the completion of each year in the program. The performance review shall include a review of grades and, where appropriate, seminar papers and other evidence of potential to complete both the written and oral preliminary examination and the dissertation.

Preliminary Examination, Supervisory Committee and Program of Studies, Dissertation Prospectus and Defense

All doctoral students will take the written qualifying examination after taking all core coursework. After completing all coursework, a student must form a supervisory committee, file an approved program of studies, and then pass the preliminary examination, which is an oral defense of a publishable paper. The passing of the preliminary examination establishes the student as a doctoral candidate. A prospectus for the dissertation is then completed and must be approved by the supervisory committee. Following completion of the dissertation, the defense will be scheduled. More detailed information is contained in the PhD Student Handbook, which is available online at <https://coss.fsu.edu/askew/>.

Definition of Prefix

PAD—Public Administration

Graduate Courses

PAD 5035. Policy Development and Administration (3). This course acquaints students with the theoretical aspects of policy development and management. Particular attention is paid to the policy process in the United States. Students gain an understanding and appreciation for the political and administrative environments within which public policy is developed, implemented, and evaluated. Students also gain an understanding of how to assess policy environments, and policy options as well as build a case for taking policy actions.

PAD 5041. Public Service Ethics (3). Ethics in government focuses on the quality of public service; as such, it is core to the field of public administration. A professional is a professional not simply because of expertise, but also because of adherence to ethical standards. This course provides maps and tools to make moral experiences more explicit and consistent so students can chart their own way. Individual decision-making strategies and organizational programs to address challenges are explored. Case studies of managers who confront ethical dilemmas as well as management issues such as workforce diversity and quality improvement complement this material.

PAD 5050. The Profession of Public Administration (3). This course is an introduction to the profession of public administration. Students are introduced to the ideas, events, values, laws, people, and concepts that have shaped the development of public administration and are challenged to apply that knowledge to modern issues in public administration. The course blends essential theory with fundamental practice tools to help students develop a deeper understanding of the environment within which they will be immersed.

PAD 5057. Managing the Performance of Public Agencies (3). This course provides students with an understanding of the methods that public and nonprofit organizations can use to measure their performance, manage operations, and streamline processes to improve outcomes. The course includes techniques for developing useful performance measurement systems, using this data to monitor key outcomes and re-engineer processes, and effectively communicating this information to decision-makers to inform policy and budget decisions.

PAD 5061. Cities at Risk (3). This course uses multiple case studies to examine the state of today's major cities, particularly when it comes to disasters. In big city environments numerous factors can increase the potential for loss of life, property, and environmental resources: unplanned increased population, poor management of industries and manufacturing, increased greenhouse emissions, poor housing conditions, poor building regulations, and poor management of city growth, among many others. All these conditions can converge to create increased consequences in megacities in the developed and developing world. In this course, students explore how rising megacities in developed and developing countries can address their vulnerability and protect their citizens with policy, disaster management, and urban management practices.

PAD 5076. Professional Pathways in Emergency Management (1). Prerequisite: PAD 5397. This course explores best practices and theories regarding emotional intelligence, communication, behavior and ethics in professional emergency management. Students gain the knowledge and skills necessary to be successful in a professional emergency management setting.

PAD 5078. Applications of Unmanned Aircraft Systems (3). Prerequisite: PAD 5079. This course educates students on the applications of UAS in emergency management and other aspects of public management. The course includes flight time with a variety of multi-rotor UAS and provides in-depth discussion and experiences with this technology. Topics include data processing and analysis, crew resource management, and planning of flight operations. This class is offered as a 'weekend intensive'; class meetings happen on three designated weekends throughout the semester.

PAD 5079. Unmanned Aircraft Systems in Emergency Management (3). This course is designed to give students an overview of what UAS can do to support the phases of emergency management (response, recovery, planning, preparedness, and mitigation). The course includes the core concepts and theory behind UAS use, and exposure to regulations, guiding policies, limitations and exclusions.

PAD 5106. Public Organizations (3). This course studies the elements of micro- and macro-organizational analysis. This course includes organization theory, structure and design, power and conflict, motivation, leadership, group behavior, organizational effectiveness, and development.

PAD 5121. Managing Florida Government and Key Policy Issues (3). This course studies and analyzes the management systems, institutions, and dynamics in Florida agencies, with emphasis on legislative-executive and intergovernmental relations. The course also studies and analyzes the key policy issues that Florida faces and the historical, social, economic, and demographic factors that shape the state's response to these issues.

PAD 5142. Managing the Nonprofit Organization (3). This course examines the set of organizations variously referred to as the independent, nonprofit, voluntary, charitable, or the nongovernmental sector and combines them with the skills, knowledge, and abilities that are involved in managing them.

PAD 5173. Nongovernmental Organizations (3). This course covers nongovernmental organizations in international and transnational contexts, explores the dynamics in which NGOs are embedded, examines their historical trends, and illuminates the challenges and opportunities that NGOs face.

PAD 5174. The Independent Sector (3). This course surveys organizations variously referred to as the independent, non-profit, voluntary, charitable, and nongovernmental sector. The course also examines grassroots organizing and the roles of faith, philanthropy, and volunteerism within the sector.

PAD 5206. Fundraising and Fund Development (3). This course examines the role of fundraising and fund development in non-profit organizations, and the various fundraising techniques used by these organizations to further their mission.

PAD 5208. Budget and Finance in Nonprofit Organizations (3). This course explores budgeting and financial management in nonprofits. The course identifies appropriate financial decisions, explains financial and budgeting tools and techniques, and explores the influence of public policy on financial resources.

PAD 5227. Managing Public Financial Resources (3). This course addresses public budgeting and related financial management processes at the federal, state, and local levels with some emphasis upon those in Florida. It also studies the evolution of budgeting in the U.S. and major financial functions including an introduction to governmental accounting.

PAD 5327. Public Program Evaluation (3). This course introduces students to problems of public program evaluation methods and strategies for administrative implementation.

PAD 5373. Leadership and Communication in Emergency Management (3). This course is designed to introduce students to the fundamental concepts, theories, principles, and practices of public information and communication in a risk environment as well as effective leadership principles in an emergency management shared power context.

PAD 5376. Introduction to Terrorism: Preparedness and Response (3). This course introduces students to the fundamental concepts, theories, principles, and practices of terrorism and terrorist events.

PAD 5377r. Advanced Topics in Terrorism (3). Prerequisite: PAD 5376. This course reviews the contemporary evolution of terrorism and the current direction of global terrorism with regards to domestic policies and programs. May be repeated to a maximum of six semester hours.

PAD 5378. Disaster Systems (3). Prerequisite: PAD 5907. As potential practitioners, it is vital that participating graduate students not only recognize the underlying concepts, principles, and theories inherent in modern disaster response operations, but they must also comprehend the intricate interdependencies of these systems. Of equal importance is the impact information technology has upon these systems.

PAD 5388. Disaster Recovery and Mitigation (3). This course is designed to provide an overview of recovery and mitigation activities in the post-disaster environment. Focusing on the "Recovery Phase" initially, course materials examine the policy and planning mechanisms involved in short and long term rehabilitation of distressed communities. A similar examination of the "Mitigation Phase" is also made.

PAD 5389. Disasters: From Shock to Recovery (3). This course utilizes multiple case studies to examine the complexity of disaster situations in the United States and internationally. The course covers a different disaster case study every week, focusing on event-specific conditions that created/contributed to the disaster, local preparedness, response and recovery in the aftermath of the event.

PAD 5397. Foundations of Emergency Management (3). This course is designed to introduce students to the fundamental concepts, theories, principles and practices of emergency management.

PAD 5398. Emergency Management Programs, Planning, and Policy (3). This course examines functional demands that emergency managers should be aware of in crafting emergency management policies and programs. Students explore how public policy choices impact emergency planning and the consequences of a disaster event.

PAD 5417. Human Resource Management (3). This course provides a foundation for performing human resource management tasks, as well as a theoretical background on public personnel issues from the past, present and future. Topics include: (1) Personnel Management – recruitment, selection, promotion, merit system, and benefits, (2) Employment Relations – collective bargaining, affirmative action, harassment, and disability and (3) Human Resources – training, performance evaluation, and discipline. The topics are heavily focused on a U.S. and Florida context.

PAD 5475. Women, Disasters, and Conflict (3). This course examines the role of women in disasters. The course also evaluates the role that women play in conflict and peace building. The course covers topics including gender mainstreaming, LGBTQ issues, UNSCR 1325, gender based violence, and human trafficking.

PAD 5599. The Spy Lit Review: Intelligence in Narration (3). This course explores the Intelligence Community policy and operations through literature and film. Students examine both contemporary and classic novels and films through narration features.

PAD 5700. Research Design in Public Administration (3). This course studies fundamental concepts and techniques in research design, problem formulation, execution, and analysis, stressing applications in public policy. Includes measurement, statistics.

PAD 5701. Quantitative Analysis in Public Administration (3). Prerequisite: PAD 5700 or equivalent. Application of quantitative analysis to problems of public policy and management. Quasi and experimental designs for evaluation of social programs, computer analysis of data sets.

PAD 5755. Applied Intelligence Analysis (3). Prerequisites: PAD 4841 or PAD 5896. This course puts students in the role of analysts in a simulated intelligence requirement. This course combines classroom and online delivery methods to allow students the necessary instruction to complete the semester-long simulation as well as freedom to work collectively and individually as analysts on a product.

PAD 5828. The Third Sector: Non-Profits, Non-Governmental Organizations, and Disaster (3). This course is designed to introduce students to the fundamental concepts, theories, principles and practices in emergency management relationships with NGOs and non-profit organizations.

PAD 5835. International and Comparative Disaster Management (3). This course discusses practical and theoretical issues associated with international disaster management. Risk, hazards, and disasters are addressed from a global perspective with particular emphasis placed on the differences in key issues between developing and developed countries.

PAD 5836. International and Comparative Administration (3). This course deals with activities of public administration and governance in international contexts. The course updates comparative administration's history and explores international institutions in the face of globalization.

PAD 5837. International Terrorism Policy (3). Prerequisite: PAD 5376. This course examines international relationships between terrorists and governments in the context of global relations, politics, policy and finance. Terrorism is examined as a global phenomenon in order to understand how new policies are being developed to combat the threat it poses.

PAD 5838. Terrorism and Security in Africa (3). This course provides an in depth look at the nature and evolution of terrorism in Africa. The course covers topics including recruitment, anti-terrorism agencies/initiatives, the ramifications of colonialism on modern day terrorism, the state of security on the continent, gender roles in terrorism, and state sponsored terrorism.

PAD 5839. International Conflicts and Terrorism (3). This course introduces students to historical and ongoing conflicts around the world. Students explore how these conflicts have created terrorism and various tools to end both the conflict and the resulting terrorism. Students learn the drivers of conflict such as relative deprivation, dehumanization, and various -politics. Students also analyze how conflict resolution tools such as Peacekeepers, political revolution/evolution, autonomy/sovereignty, and violence can bring peace and end terrorism.

PAD 5845. Public Health and Emergency Management (3). This course is designed to provide an overview of international public health events that have either evolved into disasters or are born of disasters. In addition, this course looks at preventing and preparing for public health disasters. A variety of threats and case studies are reviewed with an evaluation of future threats. Additionally, epidemiology and the discovery and reporting of events are reviewed.

PAD 5848. U.S. Intelligence Community (3). This course acquaints student with the U.S. Intelligence community, the processes and platforms for information/data gathering and analysis and how the subsequent "intelligence" is used by policy/decision-makers. Throughout the course students are given opportunities to gather, analyze and report their findings to case-studies and then compare their conclusions to real-world outcomes. Upon completing the course, students have a broad knowledge of U.S. intelligence operations and the social, economic, military and covert actions that can result from intelligence recommendations.

PAD 5849. U.S. Intelligence Policy (3). This course is an introduction to the United States Intelligence Community (IC), its significant role within the U.S. government and how intelligence informs and shapes U.S. policy. This course prepares students interested in national security for additional education in intelligence studies, homeland security, and international affairs. Through lecture, assigned readings, classroom discussion, and guest speakers, the course addresses the IC and its preeminent role and effect on U.S. policy both domestically and internationally. Students explore the intersections of the IC with Congress, the DNI, the Executive branch, national security law, finance and intelligence sharing.

PAD 5859. Managing Public Procurement (3). Prerequisite: Graduate standing. This course examines the managing of the acquisition of goods and services by governments from businesses, nonprofits, and other governments; ethical obligations and legal contexts, determining requirements, make vs. buy decisions, solicitation and selection of vendors, preparation and award of contracts, and contract administration through termination are also examined.

PAD 5884. Health Care Management (3). This course examines management in healthcare organizations including hospitals, nursing homes and other larger health care agencies. This course includes a description of healthcare system; studies healthcare organizational operations; concepts and methods of health management; and the application of these concepts and methods using case studies.

PAD 5885. Advanced Intelligence Analysis (3). Prerequisite: PAD 5896. This course examines intelligence analysis through case studies of more advanced techniques in structured analysis, where students focus more on developing intelligence products based on these techniques as incorporated into the intelligence process including collection. Critical thinking plays a key role in the course readings and work.

PAD 5895. Homeland Security; Policy and Practice (3). This course is designed to introduce students to the concept and application of homeland security policies and their influence on U.S. domestic policy.

PAD 5896. U.S. Intelligence Analysis and Communication (3). This course explores the variety of intelligence analysis tools and techniques common to U.S. federal, state, and local agencies, using simulations and activities to understand how raw information is transformed and presented as intelligence. Emphasis will be placed on OSINT analysis, but other-source intelligence will be included based upon industry needs. Additionally, plain language writing and intelligence presentations will be included in learning materials.

PAD 5898. Global Security and Fusion (3). This course examines how the nations of the world unite for a common cause, outlining geo-political and strategic relationships that serve to streamline and facilitate such relationships, the critical importance of U.S. security and intelligence cooperation with our partners and allies, and how our military supports our civilian authorities in a variety of ways toward this end.

PAD 5907r. Directed Individual Study (1-3). (S/U grade only). Supervised readings and research. Student must submit formal written proposal to interested faculty member prior to registration. MPA may repeat to a maximum of nine semester hours. PhD students may exceed the nine hour maximum with approval of major professor.

PAD 5935r. Seminar in Public Administration: Selected Topics (1-3). This course acquaints students with special topics in the field of Public Administration, the processes and platforms for information/data gathering and analysis and how it is used by policy/decision-makers. Throughout the course students are given opportunities to gather, analyze and report their findings to case-studies and then compare their conclusions to real-world outcomes.

PAD 5946. Public Service Internship (3). (S/U grade only). Participant observation of the administration of public policy in governmental organizations. Faculty supervision, on-campus seminars, discussion papers.

PAD 6025. Theoretical Perspectives in Public Policy (3). Prerequisite: PhD student or instructor permission. Course addresses topics related to substance and methods of public policy. Theoretical frameworks includes welfare/economics/political science and organization theory.

PAD 6054. Intellectual History and Future of Public Administration (3). Prerequisite: PhD student or instructor permission. Discusses the history of the underlying theoretical perspectives of public administration as well as trends and conditions relevant to the future development of public administration theory.

PAD 6102. Administrative Behavior in Public Organizations (3). Prerequisite: PhD student or instructor permission. Dynamics of cooperative effort in the managing of governmental organizations, public leadership and influence systems, motivation, communication, and political behaviors.

PAD 6103. Cultural Analysis and Organizations (3). Prerequisite: PAD 5106. Both theoretical and methodological in purpose, the course explores the cultural approach to analyzing organizational settings and the institutions in which they are embedded. Introductory skills in ethnographic research will be acquired by those students who successfully complete the course.

PAD 6109. Institutions and Society (3). Prerequisite: Doctoral student or instructor permission. Government bureaucracies as key elements in modern social systems and the role of society in shaping government bureaucracies.

PAD 6136. Seminar: Management Studies in Government (3). Prerequisite: PAD 5700 or equivalent. Seminar on management studies in state or local governments; development of detailed plans for management study, methods, source materials.

PAD 6207. Financial Resources Administration (3). Prerequisite: PAD 5227 or equivalent. Seminar in public financial administration with emphasis on current issues in theory and practice.

PAD 6226. Public Budgeting Simulation and Issues (3). Prerequisite: PAD 5227 and 5701, or equivalents. Experiential learning in public budgeting through individual and team simulation, preparation of reports, and inquiry into selected issues.

PAD 6300. Governmental Administration in Florida (3). This course studies and analyzes management systems, institutions, and dynamics in Florida agencies, with emphasis on legislative-executive relations.

PAD 6705. Analytic Techniques for Public Administrators (3). Prerequisites: PAD 5700 and 5701, or equivalents; Doctoral students or instructor permission. Public sector applications of quantitative methods, including decision analysis, queuing theory, mathematical programming, and simulation.

PAD 6707. Logics of Inquiry (3). Prerequisites: PAD 5700. This course introduces students both to the philosophy of science and to exemplary research conducted in public administration. Students will learn to target research both theoretically and politically.

PAD 6721. Policy Analysis Research Seminar (3). Prerequisites: PAD 5700 and 5701. Introduction to analysis as a process for informing public policy making and to two techniques useful in doing policy analysis benefit-cost analysis and dynamic modeling. Complements tools acquired in PAD 5327 and 6705.

PAD 6908. Action Report (3). Prerequisites: All prior required MPA coursework and instructor permission. Application of concepts in public administration literature to actual management problems. Diagnosis of decision situation, collection of relevant data, development of alternative solutions, recommendation of proposed course of action. Students must submit formal, written proposal one semester prior to registration.

PAD 6915r. Supervised Research (1-5). (S/U grade only). Prerequisite: instructor permission. Approved research under the supervision of a member of the faculty. Doctoral students must complete at least three hours under supervision of the major professor. May be repeated to a maximum of five semester hours.

PAD 6930r. Professional Topics in Public Administration (0). (S/U grade only). This course is offered at zero credit hours as an administrative mechanism to ensure student attendance at a series of professionally oriented events. Doctoral students are required to attend these events over four semesters.

PAD 6960r. Preliminary Examination Self-Study (0-12). (S/U grade only). Provides time for informal interaction with faculty to study for preliminary doctoral examination. May be repeated to a maximum of twelve semester hours.

PAD 6980r. Dissertation (1-12). (S/U grade only).

PAD 8964. Preliminary Doctoral Examination (0). (P/F grade only.) For students registering to take their doctoral examination.

PAD 8985. Dissertation Defense (0). (P/F grade only.)

PUBLIC POLICY:
see Political Science

PUBLIC RELATIONS:
see Communication

QUANTITATIVE METHODS/BUSINESS:
see Management; Statistics

RADIO, TELEVISION:
see Communication

READING AND LANGUAGE ARTS:
see Teacher Education

REHABILITATION COUNSELING:
see Educational Psychology and Learning Systems

Graduate Master of PUBLIC HEALTH

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <http://www.coss.fsu.edu/publichealth/>

Director: William G. Weissert; **Faculty:** Burdette, Coutts, Lee, McFarland, Rowan, Sherron, Uejio

The College of Social Sciences and Public Policy offers the interdisciplinary Master of Public Health (MPH) and the combined Bachelor of Science/Master of Public Health (BS/MPH) Pathway.

MPH degree graduates are trained principally in health policy but also acquire a solid background in epidemiology, environmental health, health care finance, health behavior, health administration, health policy and policy analysis, and statistical and qualitative analytic skills. Careers are likely to include positions in government agencies or legislative staff, policy and consulting firms, healthcare organizations, advocacy organizations and lobbying firms, international organizations focused on health and population issues, academia, or media.

Requirements

Students must meet the University's general requirements for graduate admission and must be recommended by the program's admissions committee. A candidate is admitted to the program by meeting the general requirements for graduate study. All applicants must take the verbal and quantitative portions of the Graduate Record Examinations (GRE), or equivalent, prior to admission to the program. International Students must submit official English Proficiency Test scores (TOEFL or IELTS) if their native language is not English.

The program of study is a total of forty-two (42) credit hours, where students complete thirty-three (33) core credits and nine (9) elective credits. The 200-hour internship class, PHC 5945, is completed within the thirty-three (33) core credit hours. Students choose their nine (9) electives from an approved course list posted by the program every semester, based on availability of classes. Students can set their own pace from part-time to full-time. With appropriate planning, the program's requirements may be completed in three or four semesters and a summer semester. Other students prefer to follow a more relaxed pace.

Combined Bachelor of Science/Master of Public Health (BS/MPH) Pathway

For the Combined Bachelor of Science/Master of Public Health (BS/MPH) Pathway, Florida State University undergraduate students may apply up to twelve credits of MPH courses taken while enrolled as undergraduates toward the MPH if they enroll in the Public Health degree program. The combined bachelor's/master's pathway allows academically talented students the opportunity to acquire their MPH degree in a shorter time.

Undergraduate students may take up to 12 hours of graduate level work while completing their bachelor's degree. These hours will count towards both the 120 credit hours needed for the bachelor's and the overall 42 credits hours needed for the master's degree. Admission into the BS/MPH pathway does NOT grant admission into the Master of Public Health Program. This pathway is designed to allow undergraduate students to take graduate level coursework. Students would still need to take the GRE and apply to the MPH program by the appropriate deadlines. Students must meet the following minimum criteria:

- Minimum 3.25 GPA and minimum GRE score between 148 – 160 on the verbal and quantitative portions of the exam OR minimum 3.5 GPA (GRE waived for combined, but still required for graduate school application)
- 90 credit hours of completed coursework
- Two semesters (24 hours earned) at FSU
- One page paper showing intent and interest in program
- Instructor permission for each course
- Meet with graduate academic program specialist to discuss course availability

Students who believe they are eligible for admission into the combined pathway, and would like to participate will need to contact the Public Health Academic Program Specialist for the application.

Joint Planning and Public Health Graduate Pathway (MPH/URP) Requirements

In order to better prepare students for overlapping careers in Planning and Public Health, a Joint Graduate Pathway has been created through which a student may earn the degrees of Master of Public Health (MPH) and Master of Science in Planning (MSP). This is one of very few Joint Graduate Pathways of this kind nationwide. Students will complete requirements for the MPH

and MSP with a total of sixty-six credit hours. All students complete a ten-week, full-time (or 400 hours) internship in a planning or public health related agency or organization. The internship should have planning or public health policy-related content. Some courses overlap, reducing total credit requirements. Students would need to apply to both degree programs separately, and if admitted to both, would be in the joint graduate pathway.

Course Requirements for the Master of Public Health (forty-two credits)

Required MPH core courses (thirty-three semester hours):

1st Year Required Courses:

- ECP 5538 Health Policy Statistics (3) *(Must be taken within first year)*
 PHC 5300 Environmental Health (3)
 PUP 5605 Health Services Organization and Policy (3) *(Must be taken in first semester)*
 URP 5521 Public Health Epidemiology (3)

OR

- PHC 5001 Public Health Epidemiology (3)
 URP 5525 Health Behavior and Education (3)

OR

- HSC 5930r Special Topics in Social Science (3) [Health Behavior]

2nd Year Required Courses:

- PAD 5935r Seminar in Public Administration: Selected Topics (3) [Health Care Finance]
 PAD 5935r Seminar in Public Administration: Selected Topics (3) [Health Care Management]
 PHC 5945 Internship (3)
 PHC 6110 Comparative Health (3)
 PUP 5607 Politics of Health Policy (3) *(Capstone)*
 SYA 5458 Social Statistics and Data Analysis for Public Health (3)

Approved MPH Electives (Nine semester hours):

Electives sections can be tailored to suit a student's needs and interests, such as policy, business, economics, epidemiology, administration, sociology, statistics, and other fields. Current approved MPH electives are subject to availability.

- EAP 5845 Academic Writing for International Graduate Students (3) *(International students only)*
 ECP 5536 Economics of Health (3)
 FOS 5205 Food Safety and Quality (3)
 GEO 5451 Medical Geography (3)
 GEO 5453 Global Health (3)
 GIS 5101 Geographic Information Systems (3) *(must also take GIS 5101L)*
 HUN 5297 Eating Disorders, Body Image and Healthy Weight Maintenance (3)
 INR 5935 Special Topics (3) [Politics of Hunger and Malnutrition]
 LIS 5418 Introduction to Health Informatics (3)
 LIS 5419 Consumer Health Informatics (3)
 LIS 5631 Health Information Sources (3)
 LIS 5661 Government Information (3)
 PAD 5845 Public Health and Emergency Management (3)
 PHC 5003 Chronic Disease Epidemiology (3)
 PHC 6002 Infectious Disease Epidemiology (3)
 POS 5698 Selected Topics (3) [Comparative Federalism]
 RCS 5080 Medical Aspects of Disability (3)
 SOW 5455 Grant Writing and Grant Management (3)
 SYA 6933r Selected Topics in Sociology (3) [Neighborhood and Health; Becoming an Adult in Strat. Society; Sexual and Reproductive Health; Health and Life Course; Medical Sociology]
 SYD 5045 Introduction to Demography (3)
 SYD 5133 Population Data (3)
 SYD 5136 Life Course Epidemiology (3)
 SYD 5215 Health and Survival (3)
 SYD 5225 Fertility (3)

- SYO 5416 Stress and Mental Health (3)
 SYO 6407 Race, Ethnicity, and Health (3)
 URP 5059 Community Involvement and Public Participation (3)
 URP 5272 Urban and Regional Information Systems (3) *(not approved if other GIS course already taken)*
 URP 5526 Healthy Cities, Healthy Communities (3)

Internship (hours included in core above)

The purpose of the internship is to gain practical skills in the application of research methods in an approved health delivery or health policy setting. The 200-hour internship experience is evaluated by the preceptor in the health setting, the student, and the faculty advisor.

Substitutions

Courses drawn from various departments may be substituted for certain core and elective requirements including introductory research design, statistics, and advanced methods. Substitutions must be approved in advance by the director or director's designee.

Definition of Prefixes

HSC—Health Sciences

PHC—Public Health Concentration

Graduate Courses

HSC 5203. Public Health History, Philosophy and Policy (3). This course provides an introductory overview of the history of public health. The philosophy and concepts basic to public health practice are addressed in depth. Basic skills related to health delivery in the U.S. and throughout the world are reviewed.

HSC 5930r. Special Topics in Social Science (1–3). Interdisciplinary special topics of current interest or utilizing special competencies of faculty. Content varies from semester to semester. May be repeated with the permission of the Director of the Interdisciplinary Program in Social Sciences.

PHC 5001. Public Health Epidemiology (3). This course is designed to introduce the student to basic concepts of applied epidemiology and to learn critical evaluation of peer-review literature. The course combines theory and practical knowledge of how epidemiology is practiced in the field.

PHC 5003. Chronic Disease Epidemiology (3). This course discusses chronic disease risk factors, conditions, and diseases and public health approaches within the context of epidemiology. Students learn concepts and methodology in describing chronic diseases and their methods for control.

PHC 5104. Public Health Management (3). This course provides the essentials basic to managing public health programs. Administrative content includes an overview of targeted programs, communications, and planning, budgeting, implementing, and evaluating public health programs.

PHC 5300. Environmental Health (3). This course covers the science behind the basic elements of environmental health and its centrality to human health. It includes the basics of providing a pure water supply, sanitation of waste matters, and common field procedures needed for environmental surveillance.

PHC 5912r. Public Health Capstone and Research Project (6). (S/U grade only). This practical and research application course allows the student to integrate all knowledge gained in the core courses and apply that knowledge in a systematic way through an applied research project that is defended before two faculty.

PHC 5945. Internship (3). (S/U grade only). This internship places students, under faculty supervision, in employment situations related to their academic interest; research related to a problem or issue facing the sponsor of the internship.

PHC 6002. Infectious Disease Epidemiology (3). This course introduces the basic methods for infectious disease epidemiology and case studies of important disease syndromes and entities in various disciplines within infectious disease.

PHC 6110. Comparative Health (3). This course provides a comprehensive examination of the structure of healthcare systems from selected countries worldwide. Specific attention is paid to the developmental history of the national healthcare systems, financing, and infrastructure.

Graduate Program in PUBLIC SAFETY AND SECURITY

COLLEGE OF APPLIED STUDIES

Web Page: <https://pc.fsu.edu/academics/graduate-programs/lei-ms/lei-ms-program>

Program Coordinator: Tom Kelley; **Teaching Faculty III:** Banyon Pelham;
Teaching Faculty II: Mark Feulner

The Public Safety and Security degree integrates practical exercises, both analytic and hands-on, with theoretical principles to provide students with the knowledge, skills, and abilities required by the competencies for law enforcement, security, intelligence, and investigations. The guiding perspective of public safety is as an operational spectrum from prevention to response to investigation, underlaid with intelligence, connected by a management information system, all facilitated by an overarching management system. The core and required courses are designed to provide students with an overview of this entire spectrum and also the opportunity to focus on operating within a portion of the system.

Advising

Florida State University Panama City provides academic advising to students interested in pursuing coursework in Public Safety and Security. For more information, please contact Banyon Pelham by e-mail at bpelham@pc.fsu.edu or by phone at (850) 770-2201.

Certificates

The College of Applied Studies, Public Safety and Security, offers an Underwater Crime Scene Investigation (UCSI) Certificate that may be earned independently or as part of a master's degree. For more information, please visit <https://pc.fsu.edu/ucsi-certificate-programs> or contact Mark Feulner by e-mail at mfeulner@pc.fsu.edu. In addition, the College offers a graduate certificate in Law Enforcement Intelligence. For more information, visit <https://pc.fsu.edu/graduate-certificate-lei-program-requirements> or contact Banyon Pelham by e-mail at bpelham@pc.fsu.edu.

Student Activities

The **Scuba, Hyperbaric, and Recreational Club (SHARC) Dive Club** was established to coordinate and facilitate SCUBA training due to FSU Panama City student interest in scientific and recreational diving. Membership is open to all regardless of certification status. Certified divers that are members have access to club resources such as regulators, dive lights, and buoyancy compensators. For more information, contact Darren DeDario by e-mail at dde-dario@pc.fsu.edu, contact the FSU Panama City Dive Locker at (850) 770-2206, or visit the club's Web site at <https://pc.fsu.edu/students/campus-life/student-organizations/sharc>.

Definition of Prefixes

CCJ—Criminology and Criminal Justice

CJE—Law Enforcement

CPO—Comparative Politics

DSC—Domestic Security

ISC—Interdisciplinary Sciences

SCC—Security

Graduate Courses

CCJ 5079. Managing Intelligence Analysis Functions (3). This course addresses the advanced functions of crime mapping, crime analysis, intelligence dissemination, oversight of the intelligence function and error rates.

CCJ 5616. Profiling Criminal Behavior (3). This course introduces the major issues, influences and trends considered in the behavioral analysis of criminal activity. Specifically students examine offender profiling as an educated attempt to identify the types of individuals that would have committed a certain crime. Behavior profiling methods are explored to identify behavioral characteristics of offenders and the evidence the offenders leave behind.

CCJ 5748. Advanced Evidentiary Reasoning for Criminal Intelligence (3). This course focuses on the production of intelligence from the analysis of multiple and diverse sources of information and on its use by formal and informal intelligence agencies. Emphasis is placed on the development of models for making decisions on information that is uncertain and from diverse sources. Techniques are examined for collecting and using both qualitative and quantitative data as it relates to the role of local public safety and security personnel and organizations as both producers and consumers of intelligence.

CJE 5225. Introduction to Forensic Entomology (3). This course provides an introductory overview for the field of forensic entomology, and prepares the student for subsequent courses in forensic entomology that focus on insect taxonomy, field collection, and case analysis. Course content covers a broad range of topics in basic entomology as related to forensic science.

CJE 5226. Forensic Entomology Field Collection Techniques (3). Prerequisite: CJE 5225. This course provides instruction on entomological equipment, supplies, techniques and procedures utilized to collect, rear, and preserve insects and related arthropods of medicocriminal forensic importance. Equipment and methods for acquiring weather, climatological and other relevant data are covered as well.

CJE 5227. Forensic Entomology: Case Studies and Legalities (3). Prerequisite: CJE 5225. This course delves into the legal aspects of medicocriminal entomology with the aim of preparing the student to present entomological evidence in a court of law. Information is covered on how to present evidence in an admissible manner using expert witnesses. The importance of establishing "chain of custody" and pitfalls with presenting evidence are explored through case study reviews.

CJE 5228. Forensic Entomology: Taxonomy and Post Mortem Interval (3). Prerequisite: CJE 5225. This course addresses the principles of insect identification and taxonomy. Students are responsible for the species level identification on specimens they collect from the field. Students analyze meteorological and mock crime scene temperature data and independently calculate estimates of the postmortem interval. Students utilize dichotomous keys, light microscopy, and entomological equipment for proper specimen preservation and identification.

CJE 5631. Financial Intelligence (3). This course provides the skills and knowledge required to conduct effective investigations in cases where financial intelligence is critical. This course explains how intelligence is collected, the variety of tools used to obtain and analyze financial intelligence, and the laws that govern financial intelligence collection.

CJE 5715. Capstone Project (3). Prerequisites: CCJ 5079, CCJ 5616, CCJ 5737, CCJ 5748, CJE 5739, CJE 5743, and DSC 5595. This course is comprised of a research-based project that is a theoretical or applied research-driven work of scholarship that serves as a final example of the meaningful link between theory/research and practice/application. Appropriate topics for the project have the goal of developing a concept not normally covered in the curriculum but that can be reasonably approached within the expertise of the student and research mentor.

CJE 5735. International Crime and Terrorism (3). This course examines international crime in the context of comparative criminology and justice. Students study real world examples of transnational crime with emphasis on the conflation of international terrorism and crime as well as the cross-national and international efforts to combat transnational crime.

CJE 5737. Law Enforcement Intelligence (3). This course provides the student with the foundational skills required for the establishment and management of an intelligence apparatus within a law enforcement organization. This includes the mechanisms to lawfully collect, process, integrate and evaluate information for intelligence purposes.

CJE 5739. Research Methods for Law Enforcement Intelligence (3). This course focuses on the use of basic statistics and research methods in the analysis of various types of intelligence data. The course emphasizes selecting the appropriate technique for the different problems and evaluating the results rather than the application of procedures.

CJE 5743. Introduction to Public Safety and Leadership (3). This course introduces the major issues, influences, and trends considered in the study and practice of public safety and leadership. The course includes the explanation and analysis of research theory as it applies to human behavior in the application of research and theory to the solving of real-world problems in the public safety and leadership context.

CJE 5744. Strategic Planning in Public Safety and Leadership (3). This course introduces the major issues, influences, and trends considered in the study and practice of strategic planning in the area of public safety and leadership theory, research, and practice. Course material includes explanation and analysis of research and theory as it applies to human behavior in the application of research and theory to the solving of real-world problems in the public safety and leadership in the strategic planning preparedness, mitigation, response, and recovery context.

CJE 5745. Use of Force in Public Safety and Security (3). This course builds on prior investigative courses and gives the student an in depth look at the law as it applies to the use of force, both lethal and non-lethal. Students examine relevant court decisions that drive the investigation of the use of force and explains their applications.

CJE 5768. Underwater Crime Scene Methodology (3). Prerequisites: CJE 5767, CJE 5766. This course synthesizes various theories for the conduct of crime with the knowledge of how physical evidence is produced during the commission of a crime on or under the water. Through this synthesis, students will learn to produce information using traditional underwater methodology that enables the investigation and prosecution of criminal activity. Special emphasis is placed on the validation and verification of underwater examination protocols.

CJE 5768L. Underwater Crime Scene Methodology Laboratory (1). Prerequisites: CJE 5767, CJE 5766. Corequisite: CJE 5768. This laboratory applies traditional underwater measurement methodology used for the examination of physical materials generated during the commission of a crime on or under the water, in order to produce information that enables the investigation and prosecution of criminal activity. Special emphasis is placed on evaluating the reliability of the underwater examination protocols. Additional equipment fee required.

CJE 5769. Underwater Crime Scene Investigation (3). Prerequisite: CJE 5768. This course combines the various analytical underwater examinations into a holistic investigation process designed to locate and detect persons and physical evidence involved in, or victims of, crimes committed in, or on, the water. Emphasis is placed on the theory of the technology and the scientific decision-making required for its optimum application and on conducting and evaluating and underwater investigative program.

CJE 5769L. Underwater Crime Scene Investigation Laboratory (1). Prerequisite: CJE 5768L. Corequisite: CJE 5769. This laboratory course empirically applies methodology based on advanced technology to enhance the location and detection of physical evidence used, or intended for use, in the commission of underwater crimes. Emphasis is placed on the use of the Incident Command System and the UCSI Process for management of an underwater crime scene investigation and on the verification of investigative protocols. Additional equipment fee required.

CPO 5429. Political Islam: Ideology or Religion (3). This course focuses on seeking to understand the emergence, evolution and possible futures of what is commonly called political Islam. Students examine the crucial interplay between local and global forces shaping Muslim politics as a lived reality in today's world.

DSC 5595. Human Intelligence Collection (3). This course examines techniques utilized to collect intelligence from confidential sources, assets and cooperating witnesses through interviewing, interrogation and elicitation. Students are also exposed to various methods to vet Human Sources and to uncover infiltration by hostile agencies and/or criminal organizations.

ISC 5060. Introduction to Underwater Investigations (3). This course presents the history, physics, physiology, and basic methods related to operating in hyperbaric environments. This course explores the tools and methods for safely conducting dive activities based on those principles, as well as the techniques for mitigating the associated risks. This course provides the theoretical foundation for individuals preparing to be investigators for scientific research and data collection underwater.

ISC 5060L. Introduction to Underwater Investigations Lab (1). Corequisite: ISC 5060. This laboratory course presents the principles and practice of compressed-gas as a life-support system for underwater hyperbaric exposure. It is designed to develop proficiency in the basic skills underlying the performance of safe underwater investigations. An important component of safe underwater operations is familiarity with risk mitigation techniques and emergency management procedures related to working in aquatic environments.

ISC 5061. Scientific Underwater Investigation (3). Prerequisite: ISC 5060. This course builds upon the Introduction to Underwater Investigation Laboratory by providing the technology to collect data in an underwater environment according to the scientific method. The course delineates the similarities and differences of investigative techniques used in forensic science and other science disciplines that function underwater. Emphasis is placed on the validation of measurement protocols.

ISC 5061L. Scientific Underwater Investigation Laboratory (1). Prerequisites: ISC 5060 and successful completion of the swim skills and medical evaluation, including a dive physical. Corequisite: ISC 5061. Building upon previous laboratory work, this course provides the tools and techniques to collect data in an underwater environment for prolonged periods of time. The underwater data collection techniques use traditional underwater technology adapted from forensic science and other scientific fields. Emphasis is placed on the verification of measurement protocols. Additional equipment fee required.

ISC 5930r. Special Topics in Applied Studies (3). This course allows for special topics in Interdisciplinary Studies to be taught, focusing on Applied Methods and Theory, specific to the concept of Applied Studies and Science, Technology, Engineering, and Mathematics. May be repeated to a maximum of twelve semester hours. May be repeated within the same semester.

SCC 5406. Market and Competitive Intelligence (3). This course is a detailed introduction to the legal and ethical methods of collecting and analyzing business information to support corporate decision making. Students learn effective processes and methodologies, tools and techniques to provide greater insight into market dynamics and competitor activities

Graduate Department of RELIGION

COLLEGE OF ARTS AND SCIENCES

Website: <http://religion.fsu.edu/>

Chair: Aline Kalbian; **Professors:** Corrigan, Cuevas, Dupuigrenet, Gaiser, Goff, Kalbian, Kavka, Kelsay, Twiss; **Associate Professors:** Day, Hellweg, Kelley, Levenson, McVicar, Yu; **Assistant Professors:** Buhman, Cecil, Drake, Hazard, McTighe; **Specialized Faculty:** Durdin; **Professors Emeriti:** Moore, Porterfield, Rubenstein, Sandon, Spivey

The Department of Religion at Florida State University offers the Master of Arts (MA) and Doctor of Philosophy (PhD) in the study of religion.

The Master of Arts (MA) and Doctor of Philosophy (PhD) in the study of religion combine broad exposure to the field with the development of a particular area of expertise. Those wishing to obtain information about the Master of Arts (MA) and Doctor of Philosophy (PhD) in the study of religion should consult the Department of Religion's Web site at <http://religion.fsu.edu/>.

Requirements

The minimum criterion for admission to the MA program includes a "B" average on all undergraduate work and scores from the Graduate Record Examinations (GRE). For more information on this test, see <http://www.ets.org/gre>. Students entering the program are normally expected to have a background the equivalent of at least an undergraduate minor in the study of religion.

For both degree programs, the department receives applications from more qualified students than can be admitted. Students are advised that acceptance to Department of Religion graduate programs is the result of a competitive process, and that the meeting of minimum requirements does not guarantee admission.

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Master of Arts in Religion

Master of Arts (MA) students concentrate in one of four areas: Religions of Western Antiquity (RWA); History and Ethnography of Religion (HER); American Religious History (ARH); or Religion, Ethics, and Philosophy (REP). Students should indicate their intention to work in a particular area in their application; they may petition the departmental graduate committee to change concentrations prior to the third semester of course work.

During their course of study, students will meet several general requirements. These include: thirty-three semester hours of course work in religion or other approved courses; successful completion of RLG 5035, Graduate Introduction to the Study of Religion; and competence in one foreign language approved by department faculty.

Students will also meet the requirements of their area of concentration. For each of the four concentrations, a "concentration committee" made up of religion faculty exercises oversight. The committee for a particular concentration will advise students concerning requirements for their area, including (for example) specified coursework, a thesis, or additional work in foreign languages. Students should consult the departmental website (<http://religion.fsu.edu/>) to obtain more detailed information about faculty associated with and requirements for particular areas of concentration.

Doctor of Philosophy in Religion

Requirements for the Doctor of Philosophy (PhD) program include twenty-four semester hours of approved course work beyond the Master of Arts (MA). Upon departmental approval, students then take comprehensive exams. Upon successful completion of the exams, students write and defend a dissertation on an approved topic. Areas of specialization include: Religions of Western Antiquity (RWA); History and Ethnography of Religion (HER); American Religious History (ARH); and Religion, Ethics, and Philosophy (REP). Students should consult the departmental website (<http://religion.fsu.edu/>) to obtain more detailed information about faculty associated with and requirements for particular areas of concentration.

Definition of Prefixes

HPS—History and Philosophy of Science

RLG—Religion: Graduate

SRK—Sanskrit Language

Graduate Courses

Note: Students should contact the Department of Religion office for the most up-to-date information concerning course offerings.

RLG 5035. Seminar: Introduction to the Study of Religion (3). Graduate introduction to the history, present status, principal issues, and methodologies in the academic study of religion.

RLG 5195r. Seminar: Religion and Culture (3). May be repeated to a maximum of nine semester hours.

RLG 5204r. Readings in Classical Hebrew Texts (1–3). Prerequisites: HEB 2230, or instructor permission. Intensive work on specific religious texts in classical Hebrew (ancient or medieval). Choice of texts will vary by semester. May be repeated to a maximum of twelve semester hours.

RLG 5292r. Tutorial in Near Eastern Languages and Literature (1–3). Readings of selected religious texts in Semitic languages such as Akkadian, Ugaritic and Aramaic. The languages studied and course content will vary by semester. Previous work in a Semitic language is presumed. May be repeated to a maximum of twelve semester hours.

RLG 5297r. Seminar: Biblical Studies (3). May be repeated to a maximum of nine semester hours.

RLG 5305r. Seminar: History of Religions (3). May be repeated to a maximum of nine semester hours.

RLG 5318r. Tutorial in Classical Chinese Religious Texts (3–12). Prerequisite: One year of Chinese language or familiarity with written Chinese. This seminar covers selected primary-source readings in classical Chinese about Chinese religions. Readings are drawn from a sampling of historical periods and genres, including canonical literature, philosophical treatises, ritual manuals, poetry, hagiography, and local gazetteers. Students learn to use lexical and bibliographic references, digital resources, and other research tools. May be repeated to a maximum of twelve credit hours.

RLG 5328r. Tutorial in Greek Religious Texts (1–3). Selected readings in Greek of Jewish, Christian and other religious texts from the ancient world. May be repeated to a maximum of twelve semester hours.

RLG 5332. Modern Hinduism (3). Selected topics on the Hindu tradition in 19th and 20th century India. Includes modern Hindu thinkers, reform movements, popular religion, Hindu nationalism, and pluralism. Attention also to Hindu-inspired religious movements outside India and to other topics of student interest.

RLG 5346r. Seminar: Chinese Buddhism (3–12). Prerequisite: One year reading knowledge of Chinese. Corequisite: One undergraduate level class on Chinese or East Asian religions. This course looks at Chinese Buddhism by way of social and cultural practice; examining the institutional, ritual, and doctrinal components for the construction of Buddhist values, roles and identities within the larger field of Chinese religious life. Special consideration is given to the symbolics of religious alterity, especially as they apply to the negotiation between Buddhist and non-Buddhist traditions. May be repeated to a maximum of twelve semester hours.

RLG 5354r. Special Topics in Asian Religions (3). This course focuses on selected topics and themes in the academic study of Asian religions, with special emphasis on issues of methodology. Topics may include key theories in Asian studies, religion, philosophy, history, sociology, and anthropology intended to help students develop critical skills. May be repeated to a maximum of twelve semester hours as topics vary. May be repeated within the same semester.

RLG 5356r. Readings in Tibetan Religious Texts (3–12). Prerequisite: Basic reading knowledge of classical Tibetan. This seminar covers selected primary-source readings in Tibetan language about the religious history of Tibet. Readings are drawn from a variety of historical periods and genres, including history, biography, Buddhist canonical texts, philosophical treatises, ritual manuals, poetry, and epic narrative. The course also introduces students to various tools and methods for the study of classical and modern Tibetan literature. May be repeated to a maximum of twelve semester hours.

RLG 5367. Seminar on Shi'ite Islam (3). This seminar focuses on the manifold expressions of Shi'ism from its origins to the present day. It examines the political divisions within the early Islamic community that led to the development of the *shi'a*. The seminar also examines the earliest Shi'a sects and the major juridical and theological developments within Ithna-'Ashari ("12er") Shi'ism, such as the doctrine of the Imamate and the occultation and return of the 12th Imam. The seminar also studies the establishment and elaboration of Fatimid Isma'ilism. The latter part of the seminar is devoted to contemporary issues among the Shi'ites, including contemporary treatments of the martyrdom of Hussayn and the role of Hizbullah in the politics of the Middle East.

RLG 5368. Islam in North America (3). This course surveys in seminar format the manifestations of Islam in the United States, as well as American perceptions of Islam and Muslims. The course begins with the early eighteenth century and examines early American attitudes toward Muslims, and then moves to the experience of Islam among African-Americans. The latter third of the course is devoted to the assimilation of Muslim immigrants in the US, and how the issues of race, gender, "trans-nationalism" and stereotypes impact the American Muslim community.

RLG 5486. Religious Thought in America (3). The classic theological traditions in American religion from Puritanism to contemporary theology. Emphasis will be on Protestant thought, but attention will be given to representative Roman Catholic and Jewish thinkers.

RLG 5497r. Seminar: Religious Thought (3). May be repeated to a maximum of nine semester hours.

RLG 5514. Christianity in Late Antiquity (3). Christian thought, institutions, life-styles, and literature in their social, cultural, and historical contexts from the time of Jesus to the early Middle Ages.

RLG 5516. Christianity after the New Testament (3). Prerequisite: REL 2240 or instructor permission. The course covers major developments in the history and theology of Christianity in the first three centuries of the common era.

RLG 5562. Modern Roman Catholicism (3). The Catholic Church from the Council of Trent to the present day; special consideration given to Vatican II, current problems, and leading thinkers.

RLG 5612. Judaism in the Graeco-Roman World (3). A history of the Jews and the development of Jewish religious ideas, literature, institutions and practices from the Maccabean Revolt to the redaction of the Babylonian Talmud.

RLG 5616. Modern Judaism (3). The development of Judaism as a religious and cultural phenomenon in Europe, North America, and the Middle East from the European Enlightenment to the birth of the State of Israel.

RLG 5906r. Directed Individual Study (1–3). May be repeated to a maximum of twelve semester hours.

RLG 5911r. Supervised Research (1–3). (S/U grade only). A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

RLG 5915r. Tutorial in Sanskrit Texts (1–3). Prerequisite: SRK 4102, or equivalent. Readings in Sanskrit of selected religious texts. Topics will vary by semester. May be repeated to a maximum of twelve semester hours.

RLG 5916r. Tutorial in Latin Religious Texts (1–3). Readings in Latin of selected religious texts. Topics will vary by semester. A basic knowledge of Latin grammar is presumed. May be repeated to a maximum of twelve semester hours.

RLG 5937r. Special Topics in Religion (3). May be repeated to a maximum of twelve semester hours.

RLG 5940. Supervised Teaching (3). (S/U grade only). A maximum of three hours may apply to the master's degree.

RLG 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

RLG 6176r. Seminar: Ethics and Politics (3). Seminars in ethics and politics encourage research into the relationships between religion, morality, and the social-political life of persons and groups. May be repeated to a maximum of twelve semester hours.

RLG 6298r. Seminar: Scriptures and Interpretation (3). Seminars in scriptures and interpretation encourage research in selected aspects of the interpretation of sacred texts in a particular tradition or traditions. May be repeated to a maximum of twelve semester hours.

RLG 6498r. Seminar: Religious Thought (3). Seminars in religious thought are designed to encourage research in the area of religious thought through inquiry into specific themes, persons, or movements. May be repeated to a maximum of twelve semester hours. May be repeated within the same term.

RLG 6596r. Seminar: Religious Movements and Institutions (3). Seminars in religious movements and institutions encourage research in selected religious movements and institutions in a religious tradition. May be repeated to a maximum of twelve semester hours.

RLG 6904r. Readings for Examination (1–12). (S/U grade only). This course is designed for graduate students who have completed all of their required course work and are preparing for their examinations. May be repeated to a maximum of twenty-four semester hours.

RLG 6980r. Dissertation (1–12). (S/U grade only). May be repeated to a maximum of twenty-four semester hours.

RLG 8964r. Preliminary Doctoral Examination (0). (P/F grade only.) May be repeated in the same semester.

RLG 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

RLG 8976r. Master's Thesis Defense (0). (P/F grade only.)

RLG 8985r. Dissertation Defense (0). (P/F grade only.) May be repeated in the same semester.

SRK 5236, 5237. Intermediate Readings in Sanskrit I, II (3, 3). Introduction to Sanskrit reading through a study of grammar, syntax, and vocabulary

**RELIGION:
see also Asian Studies**

**RESEARCH AND EVALUATION METHODS
see Educational Psychology and Learning Systems**

Graduate Department of RISK MANAGEMENT/INSURANCE, REAL ESTATE AND LEGAL STUDIES

COLLEGE OF BUSINESS

Web Page: <https://business.fsu.edu/departments/rmi>

Chair: Cassandra Cole; **Professors:** Cole, Gatzlaff, McCullough, Patricia Schriefer, Sirmans; **Associate Professor:** Marzen, Nyce, Orozco; **Assistant Professors:** Broxterman, Eastman, Letdin; **Teaching Faculty III in Legal Studies and Real Estate:** Bailey, Woodyard; **Teaching Faculty I:** Paul Schriefer; Stith; **Research Faculty I:** Nicholson; **J. Harold and Barbara M. Chastain Eminent Scholar in Real Estate:** G.S Sirmans; **Payne H. and Charlotte Hodges Midyette Eminent Scholar in Risk Management and Insurance:** Patricia Schriefer; **Francis J. Nardoza Scholar in Real Estate:** Sirmans; **Mark C. Bane Professor in Business Administration:** Gatzlaff; **State Farm Professor of Risk Management and Insurance:** McCullough; **Dr. William T. Hold/The National Alliance Professor in Risk Management and Insurance:** Cole

The Department of Risk Management/Insurance, Real Estate and Legal Studies is comprised of three distinct curricular areas: (1) risk management/insurance, (2) real estate, and (3) business law.

The risk management/insurance program offers a doctoral degree (PhD) with a concentration in risk management/insurance, a master's degree in risk management-insurance (MS-RMI), and a bachelor's degree with a major in risk management/insurance.

The real estate program offers a specialization in real estate finance and analysis in the online MBA program, a specialization in real estate finance and investment in the on-campus Master of Science in Finance (MSF), a combined pathway with the Bachelor of Science and in Real Estate and the Master of Science in Finance (BS-RE/MSF), a doctoral program support area, a graduate certificate in real estate development, and a bachelor's degree with a major in real estate.

The business law curriculum is a non-degree service program providing core courses for all majors in the college, as well as courses tailored for specific majors at the graduate and undergraduate level.

The department's programs and faculty are consistently recognized as among the nation's best. The department is committed to having preeminent programs in risk management/insurance, real estate, and business law, as well as nationally prominent faculty in each of its three curricular areas.

Requirements

The Master of Science program in risk management/insurance requires completion of thirty-three semester hours of graduate level coursework.

The doctoral program primary area consists of coursework in the area of risk management/insurance, as well as support area work and the analytical and research tools courses. Typical support areas for risk management/insurance majors include finance and real estate, but there is flexibility to match the interests of the particular student.

For additional information related to graduate Risk Management/Insurance, Real Estate and Legal Studies programs, contact the Graduate Office, *College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110*, or via e-mail at gradprograms@business.fsu.edu.

Doctoral Program

The College of Business offers a doctoral program in business administration. The doctoral concentration in the Department of Risk Management/Insurance is designed to give students broad preparation in the theory and practice of modern risk management and employee benefits administration, based on foundation knowledge of the insurance contract and institution. The faculty is committed to working closely with a few students and seeing those students to a timely completion of their programs. The areas of expertise represented by the faculty allow students to pursue various research and teaching interests as they prepare for careers in academic institutions.

Online Master's Programs

The Master of Science program in risk management/insurance is designed for risk management and insurance professionals. The convergence in the financial services marketplace requires insurance, brokerage, and banking managers to have a much broader base of knowledge in order to effectively compete. The insurance major in the master's program addresses this need. It is offered on a distance-learning basis to allow the working professional to obtain a degree.

The College of Business also offers an online Master of Business Administration (MBA) program in which students may choose to specialize in real estate finance and analysis. Demand for graduate education in real estate

has increased dramatically over the last decade due to advancements in the real estate finance and investment markets. This includes increased involvement of institutions in commercial real estate investment and lending activities, growth in the securitization of real estate equity and debt assets on Wall Street (e.g., REITs, MBSSs, and CMBSs), and consolidation of regional real estate service firms into larger national and international entities. Substantial opportunities exist in the real estate market for graduates trained in commercial real estate finance and investment.

For additional information related to the online MS in RMI program, contact the Graduate Office, *College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110*, or via e-mail at gradprograms@business.fsu.edu.

Combined Bachelor's in Real Estate/Master of Science in Finance Pathway (BS-RE/MSF)

There is substantial growing demand for students with advanced training and graduate preparation in the area of real estate finance and investment. Outstanding opportunities in real estate investment, lending, asset management, valuation, brokerage, and other service areas are expanding within institutional investors, investment banks, private equity firms, portfolio lenders, pension funds, and other service providers. Students with a strong combination of advanced analytical skills in finance and real estate are ideally suited to compete for positions emerging within leading companies.

Students will need to apply for admission to the combined BS-RE/MSF pathway in their junior year to take courses in their senior year. Admission requires an overall GPA of 3.4 or higher, an upper-division GPA of 3.2 or higher, and an upper-division GPA of 3.2 or higher in their upper division finance and real estate courses. Admitted students are then able to register during their senior year for up to nine semester hours of graduate courses that count towards both the BS-RE and MSF degrees. Students admitted to the combined BS-RE/MSF pathway will still be required to apply for the MSF program, which begins in the second six-weeks of the summer semester and is completed the following spring semester, through the regular process in their senior year.

For additional information related to the BS-RE/MSF program, contact the Graduate Office, *College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110*, or via e-mail at gradprograms@business.fsu.edu.

Definition of Prefixes

BUL—Business Law

REE—Real Estate

RMI—Risk Management and Insurance

Graduate Courses

Master's

Note: The 5000-level courses are reserved exclusively for graduate students. Courses which may be repeated for credit are designated by "r" immediately following the course number.

BUL 5810. The Legal and Ethical Environment of Business (3). This course creates an awareness of the laws and of the legal, political, and social institutions impacting business activity. The course emphasizes public law and governmental regulation, ethics and corporate governance, as well as landmark legislation and judicial decisions.

BUL 5907r. Directed Individual Study (1-3). Prerequisite: Consent of Associate Dean for Academic Programs. May be repeated to a maximum of nine semester hours.

REE 5105. Real Estate Valuation (3). This course provides an advanced treatment of real estate valuation analysis. This includes a description of valuation procedures, identification of highest and best use, application of real property valuation methods, and emerging topics of special interest.

REE 5205. Topics in Real Estate Finance (3). This course provides an advanced treatment of topics fundamental to real estate finance. The course topics are presented in units that range from pricing mortgages to the lending process to the secondary mortgage. Topics include a discussion of primary and secondary mortgage markets, mortgage market operations, mortgage instruments and mortgage-related securities. Emerging topics of special interest are also discussed.

REE 5209. Advanced Real Estate Finance and Investment (3). Prerequisite: REE 4204, REE 5205, or instructor permission. This course addresses advanced topics in real estate finance and investment. Attention is given to the role of institutional investors, advisors, and real estate investment trusts (REITs). The course provides an in-depth treatment of financing income-producing properties, including coverage of the commercial mortgage underwriting process. Students are introduced to real estate investment analysis at the property portfolio level. The topics covered are of importance to real estate analysts, lenders, asset managers, appraisers, and brokers involved with income-producing real estate.

REE 5305. Real Estate Investment (3). This course introduces students to the procedures and analytical methods used to evaluate real estate markets and project-specific investments. The courses focuses on the topic of real estate investment analysis primarily from the private (equity) investor's perspective.

REE 5907r. Directed Individual Study (1-3). Prerequisite: Consent of Associate Dean for Academic Programs. May be repeated to a maximum of nine semester hours.

RMI 5017. Fundamentals of Risk and Insurance (3). This course develops concepts such as time value of money, statistical analysis, information technology, and management of risk exposure. Topics include risk fundamentals, risk management, insurer operations, and insurance regulation.

RMI 5018. Alternative Risk Financing (3). This course evaluates how corporations and insurance companies finance risk. The course covers the basic financial tools that are used in risk financing, the traditional and alternative risk financing techniques corporations use, and the unique risk financing techniques used by insurance companies.

RMI 5087. International Risk Management (3). The course provides an overview of risk management in a global economy. Students discuss the complexities and opportunities of risk in a global environment. The course builds on prior knowledge of risk assessment, control and financing tools, and applies them to multinational and international settings, as well as exploring trends and issues in global risk management.

RMI 5136. Employee Benefit Plans (3). Managerial approach to employee benefit plans such as group insurance and pensions with in-depth consideration given to funding instruments and variety among plans.

RMI 5225C. Property/Liability Insurance Contract Analysis (3). Prerequisite: RMI 5017. This course analyzes basic commercial property and liability insurance contracts, including commercial property, commercial general liability, crime, inland marine, boiler and machinery, commercial auto and farm policies.

RMI 5257. Data Analytics in Risk Management and Insurance (3). This course focuses on the use of data and analytical tools in the insurance industry. Students develop tools for analyzing the types of data used by insurers across various functions including loss estimation, loss reserving, underwriting, and claims.

RMI 5345. Risk Management in the Business Enterprise (3). Application of the risk management process, including risk control and risk financing techniques, to business risk management problems.

RMI 5710C. Insurance Company Operations (3). Prerequisite: RMI 5017. This course covers the fundamentals of risk, the management of pure risk, insurance mechanisms, insurer operations, and the evolution of risk management.

RMI 5720C. Insurance Accounting and Finance (3). Prerequisite: RMI 5017. This course is a survey of accounting and finance, financial statement analysis, and statutory requirements for insurance companies.

RMI 5810. Personal Financial Planning (3). This course analyzes loss exposures facing individuals and families, basic personal-lines property-liability insurance (auto and homeowners), individual life, health and disability insurance, and individual/family financial planning.

RMI 5906r. Directed Individual Study (1-3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of three times.

RMI 5907r. Special Studies in Management (1-3). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of three times.

RMI 5917r. Supervised Research (1-3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. For Master's candidates only. A maximum of three hours may apply toward the master's degree. May be repeated to a maximum of five semester hours.

RMI 5935r. Special Topics in Risk Management and Insurance (1-3). This course evaluates how corporations and insurance companies finance risk.

RMI 5946r. Supervised Teaching (1-3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. A maximum of three hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

Doctoral

Note: The doctoral curriculum includes courses selected from the following in addition to those offered at the 5000 level. In exceptional cases master's candidates may elect 6000 level courses with permission of the instructor and the associate dean for academic programs.

RMI 6195. Doctoral Seminar in Insurance: Life/Health Insurance Topics (3). Review of current literature and theory in life/health insurance, including product development, management and regulation of life insurance companies, and the place of life insurance companies in the capital markets.

RMI 6296. Doctoral Seminar in Insurance: Property/Liability Insurance Topics (3). Review of current literature and theory in property/liability insurance, including product development, management and regulation of property/liability insurance companies, and the place of property/liability insurance companies in the capital markets.

RMI 6395. Doctoral Seminar in Risk and Insurance Theory (3). Review of literature in the theoretical foundations of risk and insurance, including the concept of risk, contributions from other disciplines, determinants of insurance consumption and risk management decisions, and industry dynamics.

RMI 6917r. Supervised Research (1-3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five semester hours.

RMI 6946r. Supervised Teaching (1-3). (S/U grade only). Prerequisite: Consent of associate dean for academic programs. May be repeated to a maximum of five semester hours.

RMI 6980r. Dissertation (1-12). (S/U grade only). A minimum of twenty-four semester hours is required.

RMI 8964r. Doctoral Preliminary Examination (0). (P/F grade only.)

RMI 8985r. Dissertation Defense Examination (0). (P/F grade only.)

RUSSIAN:
see Modern Languages and Linguistics

Graduate Interdisciplinary Program in RUSSIAN AND EAST EUROPEAN STUDIES

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <https://coss.fsu.edu/rees/>

Director: Lee Metcalf (Social Sciences)

Director of Internships and Professional Development: Na'ama Nagar (Political Science)

Russian and East European Studies is an interdepartmental program leading to the degree of Master of Arts (MA) or Master of Science (MS). The program is designed to give students a well-rounded understanding of the language, culture, history, and contemporary political and economic conditions in Russia and/or Eastern Europe. The approach is broad, interdisciplinary, multinational, and comparative. Courses are offered in the areas of political science, economics, public administration, geography, history, language, literature, religion, philosophy, urban and regional planning, and art history. Many students in the program anticipate careers in government, business, international organizations, journalism, or teaching. Other students use the program as a stepping stone into more specialized doctoral programs by developing a language and area competence and exposure to graduate coursework prior to entering a PhD program in one of the disciplines represented by the participating Russian and East European Studies faculty.

Requirements

Admission Requirements: A candidate is admitted to the degree program by meeting the University's general requirements for graduate admission and by recommendation of the director and executive committee of the degree program. It is recommended that the student have undergraduate preparation in those fields where graduate work is contemplated. A candidate is admitted to the program by meeting the general requirements for graduate study. All applicants must take the verbal and quantitative portions of the Graduate Record Examinations (GRE) or equivalent prior to admission to the program. International Students must submit official English Proficiency Test scores (TOEFL or IELTS) if their native language is not English.

Program Requirements: The program is a total of thirty-one (31) credit hours, where students choose between completing a comprehensive exam or thesis route. Students selecting the first option will undergo comprehensive examination on the coursework taken for their degree during their last semester in the program. With the advice and consent of the director and the participating faculty, the student selects a three-person committee from among the Russian and East European Studies faculty to supervise the student's degree program. The committee members must be drawn from at least two different disciplines.

The student's supervisory committee will administer the exam. Students selecting the thesis option will designate one of their committee members to serve as their major professor at least two semesters prior to completing their degree program. Students will then work closely with this major professor throughout the stages of outlining, researching, and writing their thesis, and six of their required thirty semester hours are to be taken as thesis hours. In lieu of a comprehensive written examination, students selecting this option will be examined by an oral defense of their thesis before their supervising committee.

Course Requirements: Students are required to take INR 5935r Special Topics (Colloquium) or an approved equivalent. This is a one credit pass/fail course that is designed to foster knowledge about the career field. Students may select courses broadly from the listing of coursework below, so long as they take a minimum of six semester hours in history and six semester hours each from the social science and arts and humanities tracks. However, students are encouraged to concentrate their coursework as much as possible to develop a particular country and language competence. Moreover, while it is required to take coursework from both the social science and the arts and humanities tracks, students should select one of these two broad areas for greater concentration, generally around one or several related disciplines. While students can take undergraduate courses as a graduate student, undergraduate coursework will not be eligible to count toward the thirty-one (31) credit hours. All thirty-one (31) credit hours must be 5000 and above.

Language Requirement: All students must satisfy the foreign language requirement for the MA degree, even if they choose to graduate with the MS degree. Students prove proficiency in Russian, Serbo-Croatian, or some other east European language by either: 1) the completion of twelve semester hours of college level coursework in the chosen language with an average grade of at least 3.0 ("B"); or 2) passage of a reading comprehension test administered by the Department of Modern Languages and Linguistics at Florida State University; or 3) four years of a single language in high school; or 4) if first

language is not English: TOEFL or IELTS. Students however, are encouraged to go much further in their language training to gain an effective competency in their chosen area language.

Note: German may be substituted with permission from the director.

Study Abroad Opportunities

Master's candidates are encouraged to participate in one of the University's summer programs in Moscow, Prague, or Dubrovnik. These summer programs allow students to immerse themselves in the cultures they are studying. See <http://international.fsu.edu> for more information on the various options available through Florida State International Programs. Students should consult with the Russian and East European Studies director about any other study abroad programs they wish to pursue. Coursework taken in overseas locations must be approved in advance for credit toward the major.

Internships

Russian and East European Studies students have the opportunity to complete an internship designed to provide practical experience, develop professional skills, cultivate valuable contacts, and investigate career options. The internship allows students to receive academic credit for internship placement in approved agencies and organizations. Information and application materials are available on the International Studies Organization site. Applications must be submitted and all internships must be approved the semester before the internship takes place. See the Russian and East European Studies program advisor in *211 Bellamy* for further information. All internships must be approved in advance by the program director.

Course Requirements

Note: Descriptions of individual courses can be found under the departmental listings. In addition to the courses listed below, special topics courses may be approved by the program director in any particular term. These courses appear on the term course lists and are available at the International Studies Organization site as well as the program office in *211 Bellamy*.

Russian and East European History

Minimum of six semester hours

EUH 5246	World War I: Europe, 1900–1918 (3)
EUH 5285	Europe since 1945 (3)
EUH 5338	History of East Central Europe, 1815 to the Present (3)
EUH 5365	The Balkans Since 1700 (3)
EUH 5458	Napoleonic Europe, 1795–1815 (3)
EUH 5578	19th-Century Russia (3)
EUH 5579	20th-Century Russia (3)
HIS 5256	War and the Nation State (3)
HIS 5265	War and Society in the Age of Revolution (3)
WOH 5246	World War II (3)

Social Science Track

Minimum of six semester hours

CPO 5740	Comparative Political Economy (3)
CPO 5934r	Selected Topics (3)
ECO 5005	Economic Principles for International Affairs (3)
ECO 5208	Global Macroeconomics (3)*
ECO 5305	History of Economic Thought (3)
ECO 5706	Seminar in International Trade Theory and Policy (3)
ECO 5707	International Trade (3)*
ECO 5715	International Finance (3)*
ECO 5716	Seminar in Theory and Policy of International Finance (3)
ECP 5115	Seminar in the Economics of Population (3)
ECS 5005	Seminar in Comparative Economic Systems (3)
ECS 5015	Economic Development: Theory and Problems (3)
GEA 5195r	Advanced Area Studies (3)
GEO 5305	Biogeography (3)
GEO 5358	Environmental Conflict and Economic Development (3)
GEO 5425	Cultural Geography (3)
GEO 5453	Global Health (3)
GEO 5472	Political Geography (3)
GEO 5704	Transport Geography (3)

- INR 5036 International Political Economy (3)
 INR 5088 International Conflict (3)
 INR 5934r Selected Topics (3)
 INR 5938 Joint Seminar in International Affairs (3)
 PAD 5376 Introduction to Terrorism: Preparedness and Response (3)
 PAD 5377 Advanced Topics in Terrorism (3)
 PAD 5837 International Terrorism Policy
 PAD 5898 Global Security and Fusion (3)
 SYA 5018 Classical Social Theory (3)
 SYD 5046 International Population Dynamics (3)
 SYD 5105 Population Theory (3)
 SYD 5135 Techniques of Population Analysis (3)
 SYD 5215 Health and Survival (3)
 SYD 5225 Fertility (3)
 SYO 5306 Political Sociology (3)
 SYO 5335 Sociology of Political Economy (3)
 SYP 5105 Sociology of National Development (3)
 SYP 5305 Collective Behavior and Social Movements (3)
 URP 5610 Introduction to Development Planning (3)
 URP 5611 Strategies for Urban and Regional Development in Less Developed Countries (3)
 URP 5847 Growth and Development of Cities (3)

*Consult with instructor and/or see course description for required prerequisite coursework.

Arts and Humanities Track

Minimum of six semester hours

- ANG 5137 Nautical Archaeology: Global View (3)
 ANG 5172 Historic Archaeology (3)
 ANG 5240 Anthropology of Religion (3)
 ANG 5242 Symbol and Ritual (3)
 ANG 5266 Economic and Ecological Approaches in Anthropology (3)
 ANG 5275 Human Conflict: Theory and Resolution (3)
 ANG 5426 Kinship and Social Organization (3)
 ANG 5471 Technology and Social Change (3)
 ANG 5478 Cultural Evolution (3)
 ARH 5220 Early Christian and Byzantine Art (3)
 ARH 5445 Modern European Art: Post-Impressionism through Surrealism (3)
 ARH 5648 Art after 1940 (3)
 MMC 5305 Comparative Systems of Mass Communication (3)
 MUT 5587 Classic, Romantic and 20th Century Styles (3)
 PHH 5405r Modern Philosophy (3)
 PHH 5505r 19th-Century Philosophy (3)
 PHH 5609r Contemporary Philosophy (3)
 PHH 6425r Philosophy of Social Sciences (3)
 PHH 6607r Ethics (3)
 PHM 6205r Social and Political Philosophy (3)
 RLG 5195r Seminar: Religion and Culture (3)
 RLG 5305r Seminar: History of Religions (3)
 RUS 5415r Graduate Russian Conversation and Comprehension (3) (S/U grade only).
 RUS 5845 History of the Russian Language and Reading of Old Russian Texts (3)
 RUT 5115 Seminar: Russian Literature in English Translation (3)
 RUW 5335 Russian Poetry (3)
 RUW 5375 Russian Short Story (3)
 RUW 5559r Seminar in 19th-Century Russian Literature (3)
 RUW 5579 Modern Russian Literature (3)
 RUW 5930r Special Topics (3)

Note: Each of the participating departments periodically offer courses in selected or special topics, or as directed individual studies, which allows a student the opportunity for greater concentration in selected areas of specialization relevant to his or her country focus.

Definition of Prefix

EUS—European Studies

Graduate Courses

EUS 5906r. **Directed Individual Study (1–3).** (S/U grade only). Subject varies with each student. May be repeated to a maximum of twelve hours.

EUS 5910r. **Supervised Research (1–3).** (S/U grade only). Subject varies with each student. May be repeated to a maximum of three hours.

EUS 5971r. **Thesis (1–6).** (S/U grade only). Topic varies with student. A minimum of six semester hours is required.

EUS 8966r. **Master's Comprehensive Examination (0).** (P/F grade only.)

EUS 8976r. **Master's Thesis Defense (0).** (P/F grade only.)

SANSKRIT:

see Religion

SCHOOL PSYCHOLOGY:

see Educational Psychology and Learning Systems

SCIENCE EDUCATION:

see Teacher Education

SERBO-CROATIAN:

see Modern Languages and Linguistics

SLAVIC LANGUAGE AND LITERATURE:

see Modern Languages and Linguistics

SOCIAL ORGANIZATION, PROCESSES:

see Sociology

SOCIAL PSYCHOLOGY:

see Psychology; Sociology

Graduate Department of SCIENTIFIC COMPUTING

COLLEGE OF ARTS AND SCIENCES

Website: <http://sc.fsu.edu/>

Chair: Gordon Erlebacher; **Professors:** Beerli, Erlebacher, Gunzburger, Meyer-Baese, Peterson, Plewa, Shanbhag; **Associate Professors:** Lemmon, Wang; **Assistant Professors:** Huang, Quaife; **Professor Emeritus:** Navon; **Courtesy Faculty:** Barbu, Duke, Hussaini, Ke, Mascagni, Mendoza Cortes, Ridley, Roeder, Ye

Program Overview

Over the last few decades, computations have joined theory and experimentation to form the three pillars of scientific discovery and technological design. Many of the critical problems facing society can only be solved by teams of individuals from a variety of disciplines. Integral to these teams are computational scientists, who provide the simulation, optimization, and visualization algorithms used to solve problems on computers. The main activity of scientific computing is the development of computational tools that have applicability over a range of scientific disciplines.

The Department of Scientific Computing consists of faculty interested in the invention, analysis, implementation, and application of computational algorithms that can be applied to problems arising in several new and traditional disciplines. Examples include biology and ecology, chemical engineering, chemistry, computer science, fire dynamics, geology and geophysics, material science, mathematics, mechanical engineering, medicine, and physics and astrophysics. An increasing number of algorithms involve machine learning and data science. Faculty and graduate students are supported in their research by several federal, state, laboratory, and commercial organizations. Further breadth and depth are added to the research and educational missions of the department through faculty from other departments at Florida State University and individuals from several national laboratories who interact closely with our faculty. These faculty members ensure that the department is ideally positioned to offer innovative degree programs that impart a synergy between the mathematical and applications-driven aspects of scientific computing, thus providing the student with extensive interdisciplinary training.

Students are trained and do research in a truly interdisciplinary environment. The graduate programs offered by the Department of Scientific Computing are designed to provide broad training in the core methods of computational science across disciplines, followed by in-depth specialization in areas of particular interest to students. Even within specializations, the focus remains on interdisciplinary approaches to solving science and engineering problems.

The Department of Scientific Computing offers degree programs leading to the Master of Science (MS) and Doctor of Philosophy (PhD) in Computational Science. Please refer to the Department of Scientific Computing Web site at <http://www.sc.fsu.edu> for the latest information about these programs, including new courses. The degree in Computational Science subdivides further into majors in Computational Science, Fire Dynamics, and Geophysical Dynamics.

The Geophysical Fluid Dynamics (GFD) Program leads to a doctoral degree in Computational Sciences with a major in either GFD or Fire Dynamics. It is an interdisciplinary field of study whose primary goal is an improvement in our basic understanding of fluid flows that occur naturally, including such diverse topics as climate and paleoclimate, biogeochemical processes, hydrology and Karst dynamics, air-sea interaction, wild fire dynamics, double diffusive processes, and hurricane dynamics with strong links to the Applied Mathematics Program. The approach to this understanding is through quantitative analysis of observational records and theoretical, mathematical, numerical, and experimenting modeling. A geophysical fluid dynamicist must have a firm grasp of the fundamental principles of classical physics, knowledge of the techniques of applied mathematics, and an interest in the natural sciences. It follows that the course of study leading to a degree in geophysical fluid dynamics is a rewarding one in which the student gains an overview of the geophysical sciences not available from study in a single discipline.

Facilities associated with the GFD major are situated in the Geophysical Fluid Dynamics Institute (<https://gfdi.fsu.edu>).

Computational Resources

The Department of Scientific Computing oversees a diverse computing infrastructure in support of research and education. Computing resources include clusters and computational servers, a bioinformatics server, and more. To best accommodate research, education, and application development, the Department maintains a heterogeneous desktop and workstation environment, as well as a state-of-the-art computer classroom. In addition, the department's

Computational Intelligence Laboratory provides high-powered visualization and computational resources to the FSU community for research, analysis of large data collections, and research in machine learning and education.

Admission Requirements

Note: Please review all University and college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Major in Computational Science

Students considering graduate work in computational science should exhibit a strong desire to develop, analyze, implement, and apply computational algorithms. Typically, incoming students will hold a bachelor's degree in mathematics, computer science, statistics, computational science, or a science or engineering discipline, and will be knowledgeable of at least one object-oriented programming language.

Applications for admission to the graduate programs in Computational Science are made to the Graduate School at Florida State University. An application form for admission that includes an official transcript from each college attended, a transcript of Graduate Record Examinations (GRE) scores, and the application fee, should be sent to the *Office of Admissions, A2500 University Center, Florida State University, Tallahassee, FL 32306-2400*.

The department also requests: 1) a letter of intent that explains the basis for the applicant's pursuit of the degree and his/her experience and commitment to the field of computational science, 2) a curriculum vitae, and 3) three letters of recommendation from individuals with knowledge of the applicant's education and/or professional background. Instructions can be found at <https://www.sc.fsu.edu/graduate/application>. A student seeking admission to the program should have taken the aptitude test of the Graduate Record Examinations (GRE) within the last three years with a minimum percentile placement of 50 and 70 in the verbal and analytical sections, respectively. Foreign nationals whose native language is not English must meet Florida State University's minimum TOEFL examination requirement.

The student should also refer to the Department of Scientific Computing Web site at <http://www.sc.fsu.edu/education> or contact the Associate Chair for Graduate Studies for any revisions to the requirements listed above since the publication of this document.

Major in Fire Dynamics

Students must pass the existing admissions procedure for regular GFDDI students and be admitted by recommendation of the GFDDI Graduate Program Committee. Students are accepted into the program on the basis of their academic record, their Graduate Record Examinations (GRE) and/or Test of English as a Foreign Language (TOEFL) score, and their letters of recommendation. To be admitted, students must have achieved a "B" average (a 3.0 average on 4.0 scale for all upper division work) of their baccalaureate degree (or any graduate degree work they may have taken) and achieved a GRE score at the 50th percentile or better on the verbal section and on the quantitative section. Students expecting to receive financial assistance will need a significantly higher GRE score. Foreign nationals are expected to have a score of 80 or better on the Internet based TOEFL, 6.5 on the IELTS examination or 77 on the MELAB examination.

Major in Geophysical Dynamics

Students apply to the Geophysical Dynamics program through the Department of Scientific Computing or through the Geophysical Fluid Dynamics Institute. Students are accepted into the program on the basis of their academic record in science and mathematics, their Graduate Record Examinations (GRE) and/or Test of English as a Foreign Language (TOEFL) score, and their letters of recommendation. To be admitted, students must have achieved a "B" average in the science and mathematics portions of their baccalaureate degree work (or any graduate degree work they may have taken) and achieved a GRE score at the 50th percentile or better on the verbal section and on the quantitative section. Students expecting to receive financial assistance (see below) will need a significantly higher GRE score. Foreign nationals are expected to have a score of 80 or better on the Internet-based TOEFL, 6.5 on the IELTS examination, or 77 on the MELAB examination.

Master's Degree

The MS degree in Computational Science is intended for students who wish to terminate their graduate studies with the MS degree but whose primary

career goal is to be a part of a research team in a non-academic environment. It is also appropriate for students seeking a PhD in Computational Science but also want to obtain an MS degree.

This degree requires a total of thirty semester hours. Required courses are ISC 5305 and ISC 5315 (totaling seven semester hours), a minimum of nine hours from remaining computational science courses with prefix ISC, plus a minimum of six hours from approved courses from other departments. The remaining six semester hours must be satisfied through additional approved course work, thesis hours, seminars, etc. Furthermore, a student must write and defend a thesis or project if the thesis or project option is selected.

Detailed, up to date information about the MS degree in Computational Science can be found in the Graduate Handbook available on the Department of Scientific Computing website at <https://www.sc.fsu.edu/graduate/handbook>.

Doctoral Degree

Major in Computational Science

The doctoral degree is awarded in recognition of the student's broad knowledge of computational science and the student's ability to conduct original, independent research in computational science. To complete the requirements for a doctoral degree, the student must 1) complete the requisite course work, 2) satisfactorily complete preliminary examinations for admission to candidacy, 3) choose a major professor and supervisory committee, 4) submit and defend a dissertation prospectus to their supervisory committee, and 5) complete independent research in computational science culminating in a written dissertation which must be successfully defended to their supervisory committee.

The doctoral degree in Computational Science has several tracks that allow students to specialize in a specific applied science or engineering discipline. All tracks require the same number of total semester hours and the same core courses. To obtain a specialization in a particular area a student must take a minimum of nine semester hours (approved by his/her supervisory committee) in the area. Current areas of specialization include: atmospheric science, biochemistry, biological science, fire dynamics, materials science, fluid dynamics, and physics.

Detailed, up to date information about the PhD degree in Computational Science can be found in the Graduate Handbook available at the Department of Scientific Computing website.

Major in Geophysical Fluid Dynamics

The interdepartmental graduate program of study leads to the doctor of philosophy (Ph.D.) degree; currently there is no master's degree offered. The program is administered by the Geophysical Fluid Dynamics Institute, and has its own separate degree requirements. It differs from the regular departmental offerings in the Earth sciences mainly by its interdisciplinary approach and emphasis on the fundamentals of mathematics, physics, and fluid dynamics, with less emphasis on descriptive material from any one discipline.

Major in Fire Dynamics

The doctoral degree is awarded in recognition of the student's broad knowledge of fire dynamics and the student's ability to do original, independent research in fire dynamics. To complete the requirements for a doctoral degree, the student must 1) complete the requisite course work, 2) satisfactorily complete preliminary examinations for admission to candidacy, 3) choose a major professor and supervisory committee, 4) submit and defend a dissertation prospectus to his/her supervisory committee, and 5) complete independent research culminating in a written dissertation which must be successfully defended to the student's supervisory committee.

The well-prepared student will have a strong background in mathematics and physics. The program director may, in some cases, admit students lacking formal credit in some areas, provided the deficiencies are overcome by subsequent coursework or study at Florida State University.

Coursework

Required courses across the three majors are ISC 5305 and ISC 5315. The remaining courses are a function of the three majors in the department: Computational Science, Fire Dynamics, and Geophysical Fluid Dynamics.

Major in Computational Science

In addition to the two required courses, students are required to take ISC 5316, a minimum of twelve semester hours from remaining computational science courses with the prefix ISC, a minimum of nine semester hours from approved courses from other departments, a minimum of 6 seminar semester hours, plus a minimum of 24 semester hours of dissertation. Additional semes-

ter hours can be chosen from other courses, seminars, dissertation credit, etc., approved by the student's supervisory committee to meet the total number of 62 semester hours and to satisfy the University's minimum course requirement.

Major in Geophysical Fluid Dynamics

The program of study for students is individually tailored to meet their particular needs and interests. The formal requirements are few and include completion of coursework from several different departments with a grade of "B" or better, participation in a seminar at least two times, mastery of modern computer techniques, particularly numerical analysis and the two Common Core Courses: Scientific Programming (ISC 5305) and Applied Computational Science-1 (ISC 5315) is the common core for all students. The remainder of the curriculum is chosen by the advisory committee in consultation with the student based upon the student's program of study. There is no foreign language requirement. The remainder of the curriculum is normally chosen from among courses offered by several departments. Typically, students, in consultation with their advisory committee, will choose from among Engineering, Geological Sciences, Mathematics, Meteorology, Oceanography, Physics, Scientific Computing, and Statistics. The courses in each discipline are listed at <https://www.sc.fsu.edu/graduate/phd/gfd>.

Major in Fire Dynamics

In addition to the two required courses, students will take the fire dynamics core courses, and an additional 12 credit hours from elective courses. The core courses in FD are as follows:

Special topics courses in collaboration with Tall Timbers Research Station (TTRS), the Jones Ecological Research Center, Apalachicola National Forest, Florida Forest Service, and the US Forest Service (USFS) in Athens, GA. Certification to work in active fireline operations. These are being developed as real classroom courses with letter grades.

- GFD 5XXX** Intro to Fire Operations (NWCG S-130/S-190) with written project
- GFD 5XXX** Fire Behavior and Ecology (TTRS, USFS)
- GFD 5XXX** Fire Dynamics Laboratory (TTRS)
- GFD 6925** Geophysical Fluid Dynamics Colloquium (1). (S/U grade only.)
- GFD 6935r** Seminar (1-2).

Major Professor and Supervisory Committee

The major professor and supervisory committee play a crucial role in guiding the student's training by approving a program of study, approving the student's prospectus, and certifying that the student can conduct original and independent research and communicate the results orally and in writing. As early as possible, a student should identify an area of research interest and obtain an informal agreement with a Department of Scientific Computing faculty member to serve as his/her major advisor. The student and advisor should subsequently establish the student's supervisory committee. In concert with the interdisciplinary nature of the PhD degree program, students may have co-major advisors.

Prospectus

After the student has successfully completed the preliminary examinations and has been admitted to candidacy, the student is required, within a year, to submit to the supervisory committee a written summary of the proposed research that will comprise his/her dissertation. The prospectus must be successfully defended to the student's supervisory committee.

Dissertation

After completion of the original research proposed in the prospectus, the student must write a dissertation document that must comply with all current University standards for style. The dissertation must be successfully defended to the student's supervisory committee.

Definition of Prefixes

- CAP**—Computer Applications
- GFD**—Geophysical Fluid Dynamics
- ISC**—Interdisciplinary Sciences
- MAD**—Mathematics: Discrete
- MAP**—Mathematics Applied

Graduate Courses

CAP 5771. Data Mining (3). Prerequisite: ISC 3222 or ISC 3313 or ISC 4304C or COP 3330 or COP 4530 or instructor permission. This course enables students to study concepts and techniques of data mining, including characterization and comparison, association rules mining, classification and prediction, cluster analysis, and mining complex types of data. Students also examine applications and trends in data mining.

GFD 6905r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine semester hours.

GFD 6915r. Supervised Research (1–5). (S/U grade only). May be repeated to a maximum of five semester hours.

GFD 6925. Geophysical Fluid Dynamics Colloquium (1). (S/U grade only).

GFD 6935r. Seminar (1–2). May be repeated to a maximum of two semester hours.

GFD 6980r. Dissertation (1–12). (S/U grade only). A student may not enroll for GFD 6980r before passing the preliminary (comprehensive) examination. Students must establish their ability to handle modern computer techniques applicable to their research.

GFD 8964r. Doctoral Preliminary Examination (0). (P/F grade only.)

GFD 8985r. Dissertation Defense (0). (P/F grade only.)

ISC 5225. Molecular Dynamics: Algorithms and Applications (3). Prerequisites: ISC 5305; MAC 2311, 2312. This course provides a comprehensive introduction to molecular dynamics simulation algorithms and their corresponding applications in molecular science.

ISC 5226. Numerical Methods for Earth and Environmental Sciences (3). Prerequisites: ISC 5305; MAC 2311, 2312. Application of numerical methods to the solution of scientific problems for earth and environmental sciences.

ISC 5227. Survey of Numerical Partial Differential Equations (3). Prerequisite: ISC 5305. This course provides an overview of the most common methods used for numerical partial differential equations. These include techniques such as finite differences, finite volumes, finite elements, discontinuous Galerkin, boundary integral methods, and pseudo-spectral methods.

ISC 5228. Monte Carlo Methods (3). Prerequisites: ISC 5305; MAC 2311, 2312. This course provides an introduction to probabilistic modeling and Monte Carlo methods (MCMs) suitable for graduate students in science, technology, and engineering. It provides an introduction to discrete event simulation, MCMs and their probabilistic foundations, and the application of MCMs to various fields. In particular, Markov chain MCMs are introduced, as are the application of MCMs to problems in linear algebra and the solution of partial differential equations.

ISC 5236. Applied Groundwater Modeling (3). Prerequisites: ISC 5226 or instructor permission. This course introduces groundwater modeling theory and practice, with emphasis on model construction, simulation, as well as calibration, and using state-of-the-art modeling tools. Students learn basic concepts and governing equations of fluid flow in porous media, computational algorithms of solving the equations, and mathematical methods of inverse modeling. Essential statistics of evaluating the quality of model simulations are introduced and examples of synthetic cases and real-world applications are used for computer labs and course projects.

ISC 5237. Uncertainty Analysis in Computational Science (3). Prerequisite: ISC 3222 or ISC 5226 or instructor permission. This course includes lectures and computer labs for understanding various uncertainty sources in computational science. Methods are taught for quantifying the uncertainties and their propagation through mathematical and computational modeling. Students learn how to communicate the uncertainty quantification to colleagues and decision-makers. They also discuss how to reduce predictive uncertainty to improve scientific understanding of complex systems.

ISC 5238C. Scientific Computing for Integral Equation Methods (3). Prerequisites: MAD 3703 and MAP 4341; ISC 4232; or instructor permission. This course covers key algorithms that are required when solving integral equations.

ISC 5247C. Geometric Morphometrics: An Introduction to Modern Methods of Applied Shape Analysis (3). Prerequisite: STA 2122, STA 2171, or equivalent. In this course, students learn about the mathematical, statistical, computational, and practical aspects of the quantitative analysis of shape. This course provides the basic background that allows those who need to use such techniques to address research questions in their own work the means to effectively do so. It also provides students coming from a more computational or quantitative background the knowledge and understanding of the methods and problems of the field so that they might contribute to the development of new and/or improved methods of shape analysis.

ISC 5249C. Computational Forensics: An Introduction to Objective, Quantitative Tools, and Methods for Forensic Science (3). Prerequisites: STA 2122, STA 2171, or equivalent, or instructor permission. In this course, students investigate some of the methods and protocols of Computational Forensics with an emphasis on the analysis and interpretation of physical evidence. Topics include stature, sex, and ancestry estimation from skeletal remains, DNA analysis, and finger print, toolmark, and bloodstream analysis. Students develop their own simple programs in an appropriate programming language to build and verify models and use existing programs to investigate the processing and analysis of physical evidence.

ISC 5305. Scientific Programming (3). Prerequisites: working knowledge of one programming language (C++, Fortran, Java), or instructor permission. This course focuses on object-oriented coding in C++, Java and Fortran 90 with applications to scientific programming. Discussion of class hierarchies, pointers, function and operator overloading and portability. Examples include computational grids and multidimensional arrays.

ISC 5307. Scientific Visualization (3). Prerequisites: CGS 4406, ISC 5305, or instructor permission. The course covers the theory and practice of scientific visualization. Students learn how to use state-of-the-art visualization toolkits, create their own visualization tools, represent both 2-D and 3-D data sets, and evaluate the effectiveness of their visualizations.

ISC 5308. Computational Aspects of Data Assimilation (3). Prerequisites: MAC 2311, MAC 2312, MAS 3105, ISC 5305, or instructor permission. This course explores common methods of data assimilation, such as Kalman filtering, ensemble filter, particle and hybrid filters, along with variational methods. These methods are introduced and derived in the context of both variational and estimation theory with emphasis on computational aspects, using simple models and current research materials.

ISC 5314. Verification and Validation in Computational Science (3). Prerequisites: MAC 2312, MAS 3105, or ISC 5315; or instructor permission. This course covers the theory and practice of verification and validation in computational sciences. Students learn basic terminology, are exposed to procedures and practical methods used in software implementation validation and in solution verification, employ exact and manufactured solutions, and explore elements of software quality assurance. The course introduces essential data analysis techniques and reviews software development and maintenance tools. Examples from physical sciences and engineering are used to illustrate aspects of code variation, including validation hierarchy, validation benchmarks, as well as uncertainty quantification and simulation code predictive capabilities. The computational laboratory is an essential part of this course.

ISC 5315. Applied Computational Science I (4). Prerequisites: ISC 5305; MAP 2302; or instructor permission. This course provides students with high-performance computational tools necessary to investigate problems arising in science and engineering, with an emphasis on combining them to accomplish more complex tasks. A combination of course work and lab work provides the proper blend of theory and practice with problems culled from the applied sciences. Topics include numerical solutions to ODEs and PDEs, data handling, interpolation and approximation, and visualization.

ISC 5316. Applied Computational Science II (4). Prerequisite: ISC 5315 or instructor permission. This course provides students with high-performance computational tools necessary to investigate problems arising in science and engineering, with an emphasis on combining them to accomplish more complex tasks. A combination of course work and lab work provides the proper blend of theory and practice with problems culled from the applied sciences. Topics include mesh generation, stochastic methods, basic parallel algorithms and programming, numerical optimization, and nonlinear solvers.

ISC 5317. Computational Evolutionary Biology (4). Prerequisites: ISC 5224 or instructor permission. This course presents computational methods for evolutionary inferences. Topics include the underlying models, the algorithms that analyze these models, and the creation of software to carry out the analysis.

ISC 5318. High-Performance Computing (3). Prerequisites: ISC 5305 or equivalent or instructor permission. This course introduces high-performance computing, term which refers to the use of parallel supercomputers, computer clusters, as well as software and hardware in order to speed up computations. Students learn to write faster code that is highly optimized for modern multi-core processors and clusters, using modern software-development tools and performance analyzers, specialized algorithms, parallelization strategies, and advanced parallel programming constructs.

ISC 5326. Introduction to Game Design and Simulator Design (3). This course introduces basic techniques used to design and implement computer games and/or simulation environments. Topics include a historical overview of computer games and simulator, game documents, description and use of a game engine, practical modeling of objects and terrain, as well as the use of audio. Physics and artificial intelligence in games are covered briefly. Programming is based on a scripting language. The course is divided into lectures and practical assignments. Course topics are assimilated through the design of a 3D game to be designed and implemented in a team environment.

ISC 5415. Computational Space Physics (3). Prerequisites: MAC 2312, MAS 3105, or instructor permission. This course offers an introduction to numerical methods in the context of observational and theoretical astrophysics. The course covers interpolation, approximation, minimization and optimization, solution of linear systems of equations, random number generation, function integration, numerical differentiation, numerical integration of ordinary differential equations, stiff systems of ODEs, survey of methods for partial differential equations (Poisson equation, heat diffusion, and hydrodynamics).

ISC 5425. Introduction to Bioinformatics (4). Bioinformatics provides a quantitative framework for understanding how the genomic sequence and its variations affect the phenotype. This course is designed for biologists and biochemists seeking to improve quantitative data interpretation skills, and for mathematicians, computer scientists and other quantitative scientists seeking to learn more about computational biology. Laboratory exercises are designed to reinforce the classroom learning.

ISC 5473. Introduction to Density Functional Theory (3). Prerequisites: CHM 3400; PHY 3101; MAC 2312; MAP 2302; or MAP 3305; or Instructor permission. Note: Basic knowledge of quantum mechanics or differential equations is preferred. Prior programming skills are not required. This course introduces density functional theory (DFT) which is widely used in industry and academia to calculate the properties of molecules and materials. This course covers basic concepts of DFT, the numerical implementation of DFT, building molecules and crystals for DFT simulations, and operating open source DFT software.

ISC 5906r. Directed Individual Study in Computational Science (1–12). Prerequisite: Instructor permission. The course covers selected topics, as designated by the students and the directing professor. The course may be repeated to a maximum of twenty-four semester hours.

ISC 5907r. Directed Individual Study in Computational Science (1–12). (S/U grade only). Study on a selected topic as designated by the student and the directing professor. May be repeated to a maximum of twenty-four semester hours.

ISC 5934r. Introductory Seminar on Research in Computational Science (1). (S/U grade only). A series of lectures given by faculty on research being conducted in the Department of Scientific Computing.

ISC 5935r. Selected Topics in Computational Science (3–12). (S/U grade only). Selected research topics that are not covered by other courses. May be repeated to a maximum of twelve semester hours.

ISC 5939r. Advanced Graduate Student Seminar in Computational Science (1–3). (S/U grade only). A series of lectures given by faculty, students or outside scholars on research and research methods related to computational science. May be repeated within the same term to a maximum of twelve semester hours.

ISC 5948r. Graduate Internship in Computational Science (3–6). (S/U grade only). Supervised internship individually arranged to accommodate professional development. May be repeated to a maximum of six semester hours.

ISC 5975r. Thesis (3–12). (S/U grade only). A minimum of six semester hours is required.

ISC 6981r. Dissertation (1–12). (S/U grade only). Prerequisite: Advisor approval. A minimum of twenty-four semester hours is required for PhD degree.

ISC 8963r. Master's Comprehensive Examination (0). (P/F grade only.) Prerequisite: Advisor approval. May be repeated with instructor permission.

ISC 8964r. Doctoral Qualifying Examination (0). (P/F grade only.) Prerequisite: Advisor approval. May be repeated with instructor permission.

ISC 8965r. Doctoral Preliminary Examination (0). (P/F grade only.) Prerequisite: Advisor approval. May be repeated with instructor permission.

ISC 8977r. Master's Thesis Defense (0). (P/F grade only.) Prerequisite: Advisor approval. May be repeated with instructor permission.

ISC 8982r. Dissertation Defense (0). (P/F grade only.) Prerequisite: Advisor approval. May be repeated with instructor permission.

MAD 5420. Numerical Optimization (3). Prerequisites: MAC 2313; MAS 3105; C, C++, or Fortran. This course covers unconstrained minimization: one-dimensional, multivariate, including steepest-descent, Newton's method, Quasi-Newton methods, conjugate-gradient methods, and relevant theoretical convergence theorems. Constrained minimization: Kuhn-Tucker theorems, penalty and barrier methods, duality, and augmented Lagrangian methods. Introduction to global minimization.

MAD 5427. Numerical Optimal Control of Partial Differential Equations (3). Prerequisites: MAD 5739; MAS 3105. This course covers Euler Lagrange equations, adjoint method algorithm. Optimal control of systems governed by elliptic, parabolic, hyperbolic PDEs. Control of initial and boundary conditions. Adjoint sensitivity analysis. Optimal parameter estimation, Kalman filter for parameter identification. Automatic differentiation techniques.

MAP 5395. Finite Element Methods (3). Prerequisites: MAD 5738 and, C++ or Fortran. This course covers the methods of weighted residuals, finite element analysis of one and two-dimensional problems, isoparametric elements, time dependent problems, algorithms for parabolic and hyperbolic problems, applications, advanced Galerkin techniques.

Graduate Interdisciplinary Program in SOCIAL SCIENCE

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <http://www.coss.fsu.edu/iss/>

Director: Robert E. Crew, Jr., Office of the Dean, College of Social Sciences and Public Policy

Note: The Interdisciplinary Program in Social Science (ISS) no longer offers a course of study leading to the Master of Arts (MA) or Master of Science (MS). However, the program provides courses with a broad background in the social sciences for students in other interdisciplinary programs within the College.

Definition of Prefixes

CPS—Comparative Policy Studies (Multinational)

HSC—Health Sciences

PHC—Public Health Concentration

Graduate Courses

HSC 5930r. Special Topics in Social Science (1–3). Interdisciplinary special topics of current interest or utilizing special competencies of faculty. Content varies from semester to semester. May be repeated with the permission of the Director of the Interdisciplinary Program in Social Sciences.

PHC 5001. Public Health Epidemiology (3). This course is designed to introduce the student to basic concepts of applied epidemiology and to learn critical evaluation of peer-review literature. The course combines theory and practical knowledge of how epidemiology is practiced in the field.

PHC 5912. Public Health Capstone Course (3). Prerequisite: Student must be a Masters Public Health major. This course introduces public health concepts as well as public health professional practice. Students examine the origins and development of the modern public health system and the relationship of public health to the overall health system. Students learn about the essential dimensions, critical issues, and contributions of public health. This course also acts as a Capstone course and includes a test the last week of the course to test knowledge of public health concepts and practice.

PHC 5945. Internship (3). (S/U grade only). This internship places students, under faculty supervision, in employment situations related to their academic interest; research related to a problem or issue facing the sponsor of the internship.

SOCIAL SCIENCE EDUCATION:

see Teacher Education

SOCIAL SCIENCE AND EDUCATION:

see Educational Leadership and Policy Studies

Graduate SOCIAL WORK

COLLEGE OF SOCIAL WORK

Website: <http://csw.fsu.edu/>

Professors: Abell, Ai, Clark, Radey, Randolph, Smith, Thyer, Wilke;

Associate Professors: Boel-Studt, T. Gomory, Lacasse, Munn, Noel, Petscher, Pettus-Davis, Schelbe, Tripodi; **Assistant Professors:** Killian, Mathias, Renn; **Teaching Faculty III:** Ashmore, Boone, Deckerhoff, Dwyer-Lee, F. Gomory, MacDill, Stanley; **Teaching Faculty II:** Kelley, Kintz, Mathis, Verano; **Teaching Faculty I:** Edwards, Goldman, Jackson, Johnson, Osborne; **Research Faculty I:** Oehme, Pryce

The College of Social Work offers programs of study leading to the degrees of:

- Master of Social Work (MSW), educating advanced practice social workers by acquiring competencies through two curricular concentrations: clinical social work and social work leadership; and
- Doctor of Philosophy (PhD), which is designed develop social work scholars and leaders in research and education who use systematic methods of inquiry and reasoned argument to advance knowledge.

For complete details of graduate degree requirements, plus a description of the college, its opportunities, and available financial assistance, refer to the "College of Social Work" chapter in this *Graduate Bulletin*, or refer to <http://csw.fsu.edu>.

Definition of Prefix

SOW—Social Work

Graduate Courses

Note: The College of Social Work regards courses accompanied by a "+" as clinical/direct practice courses that may apply toward licensure. As different boards of licensure set these criteria, the College cannot guarantee acceptance of all of these courses.

Note: There must be sufficient enrollment for particular elective courses to be offered.

SOW 5034. The Social Work Profession (3). This course helps students to begin to identify with the social work profession, its history, mission, and core values, and conduct themselves in accordance with the ethical principles that guide professional practice. Students learn how the social work profession engages in policy and practice to address issues of social and economic well-being. Students also begin to recognize the social, political, economic, and environmental influences on client systems of all sizes and apply them to the conduct of social work practice.

SOW 5105+. Human Behavior and the Social Environment I (3). This course focuses on reciprocal relationships between human behavior and social environments. Content includes empirically-based theories and knowledge that focus on the interactions between and among systems of all sizes, including individuals, groups, societies, and economic systems. Theories and knowledge of biological, psychological, sociological, cultural, and spiritual development across the life span are critiqued, especially as they relate to populations at risk. In addition, theories and knowledge about the range of social systems (individual, family, group, organizational, and community) in which people live are examined, including the ways social systems promote or deter people in maintaining or achieving health and well-being.

SOW 5109+. Women's Issues and Social Work (3). This course acquaints students with individual and social factors that affect women throughout the life span using an interdisciplinary approach. Particular attention is given to the intersections of race, age, social class, sexual orientation, and other systems of inequality that impact on women's lives. The role of the social work profession in changing society's view of women, and the role of practitioners in enabling or empowering women are also examined.

SOW 5125+. Psychopathology in Clinical Practice (3). This course provides an overview of mental health assessment and diagnostic tools, including the Diagnostic Statistical Manual categories, and touches on treatment strategies and techniques. Building on the knowledge base acquired in the foundation course, SOW 5105, this course examines the relationship between the biological, psychological, social, environmental, and cultural influences and emotional and mental health from an ecological context. Particular attention is given to variations in the assessment process and access to treatment for populations at social and economic risk. In addition, students examine the political and social implications of mental health and their relations to social work values and ethics.

SOW 5128. Cognitive-Behavioral Social Work Practice (3). Prerequisite: SOW 5308. This course provides in-depth coverage of the cognitive-behavioral model of social work practice. The empirical bases of the theory and model are examined, along with applications to direct social work practice. Through participation in this course, students learn how to move from an assessment to intervention using the CBT model.

SOW 5153+. Human Sexuality (3). This course surveys issues and attitudes associated with human sexuality. It is primarily intended for social workers and other helping professionals who currently work with clients or plan to in the future. Using a biopsychosocial perspective, emphasis is placed on the social, cultural, familial, and individual differences in sexual and reproductive attitudes, values, and behavior. Students are introduced to common sex-related issues and to the particular concerns of various sexually discriminated against groups. Information is also provided about childhood sexual abuse and adult victimization and their relationship to intimacy issues clients typically present in direct practice.

SOW 5235+. Social Welfare Policy and Services (3). This course provides a beginning understanding of the relationship between social welfare and social policy from a social work perspective. Students engage in policy practice to address social and economic well-being and to deliver effective social work services across diverse populations. Attention is given to critical analysis of the role that social work and social welfare policies and programs play in advancing human rights and social and economic justice. Emphasis is placed on the advancement of social and economic justice and human rights in a global context.

SOW 5238. Advanced Policy Analysis (3). Prerequisite: SOW 5235. This course introduces students to the procedures and processes of social policy analysis and evaluation. Attention is given to policy originating within all levels and branches of government, as well as within organizational settings. The course examines how issues are brought to the attention of decision-makers and the methods used in policy formulation. Students learn skills central to policy work, including problem definition, development and examination of policy alternatives, planning for implementation, and evaluation. The course prepares individuals to participate in the creation and assessment of social welfare policies that impact populations at risk.

SOW 5248. Homelessness in America: Peoples, Program and Policies (3). This course covers poverty in the United States, with particular emphasis on homelessness. It includes content related to values and ethics in programs and policies as well as cultural diversity among people in poverty. Particular attention is given to those who suffer from poverty and other societal oppression, such as those who are also people of color or, women, gays, lesbians, HIV positive, or disabled.

SOW 5281. Ethics in Social Work Practice (3). This course provides students with a framework of knowledge and skills to prepare them for effective ethical decision-making which adheres to the NASW Code of Ethics.

SOW 5282. Legislative Advocacy (3). This course exposes graduate students to the skills necessary to become effective human service advocates dealing with unmet needs, resolving social problems, or working to ameliorate unjust or inequitable conditions in society. As more decisions about social welfare programs have shifted from the federal to the state and local community levels, it is increasingly important for social workers to develop lobbying and advocacy skills to ensure social and economic justice. Such skills can help bring about much-needed policy changes for clients, promote and protect social work ethics and values, and positively affect human service funding during the budget appropriation process.

SOW 5308+. Social Work Practice (3). This course focuses on the development of foundation social work practice skills using the basic elements of interviewing and documentation within the values and ethics of the social work profession. Students develops foundational skills such as rapport-building, information-gathering, and record-keeping in order to engage, assess, and intervene with individuals and families in social work. The empirical basis of a range of theories and models of social work practice are examined, along with applications to generalist social work practice. The course also discusses ways to promote social and economic ways to promote social and economic justice while practicing as a social worker.

SOW 5324+. Social Work Practice with Groups and Communities (3). This course focuses on the development of the generalist group practice skills of engagement, assessment, intervention, and evaluation with social work clients, community groups, and organizations. The course covers practice skills that contribute to group effectiveness, including composition, structure, dynamics, goal setting, and evaluation. Students learn to respond to contexts that shape practice by recognizing social, political, economic, and environmental influences and applying them to social work practice. Content also includes examining the empirical base of a range of theories and models of group facilitation with clients, community groups, and organizations.

SOW 5325+. Advanced Group Practice and Treatment (3). Prerequisite: SOW 5324 or instructor permission. This course involves a critical examination of small group theory as well as the use of self in the therapeutic process. Attention is given to practice without discrimination, to knowledge and skills related to clients' age, class, color, culture, disability, ethnicity, family structure, gender, marital status, national origin, race, religion, sex, and sexual orientation.

SOW 5334. Organizational Development (3). In this course, students learn about the logic model process and how it informs new program development, service delivery and evaluation. Additionally, students learn and develop skills in performing needs assessments to identify areas for organizational change and growth as well as evaluate the effects of any changes made. Students are also exposed to the importance of sound fiscal management in organization and program development.

SOW 5340+. Theory and Practice of Poetry Therapy (3). This course introduces students to the theoretical foundations and practice techniques of poetry therapy. Specific attention is given to the use of the poetic (language, symbol, and story) in individual, couple, family, group, and community practice. The course format includes lectures, topic and case discussions, skill building exercises, and role-plays. The activities in class and assignments relate to the use of poetry therapy in a variety of human service settings.

SOW 5353+. Marital and Couple Counseling in Social Work Practice (3). Prerequisite: SOW 5611. This course introduces students to the theoretical foundations and practice techniques of couple/marital counseling. The major models of couple/marital counseling are examined. Particular emphasis is placed on having each student integrate a theory and method of couple/marital counseling within social work practice. Students examine a wide range of populations including minorities, gay and lesbian persons, and persons with disabilities. This course contains a predominant experiential component, and therefore students are expected to take a very active role in their learning.

SOW 5367+. Theories and Practice of Crisis Intervention (3). This course introduces students to the theoretical foundations and practice models of crisis intervention.

SOW 5369+. Integrative Seminar in Advanced Social Work Practice (3). Corequisite: SOW 5353. This course integrates theoretical models and concepts with practice gained in internships. The course utilizes an ecosystems perspective, focusing on the dynamic interaction between the individual, family, communities, organizations, and other social systems. A major focus is on the social worker's role in responding effectively to the challenges of working with these systems and exploring their own personal views of such issues as ethics, gender, ethnic minorities, gays, lesbians, and disabled people.

SOW 5376. Budgeting and Finances in Social Services (3). This course emphasizes the political and technical skills of budgeting and financial management, source development via grant writing and fundraising, government contracting, fiscal reporting, and payroll management.

SOW 5377. Personnel Administration in the Social Services (3). This course develops students' administrative skills in social work settings to ensure effective service delivery to clients, peers, management and direct reports. Students develop skills and knowledge related to planning, fiscal management, staff management approaches, staff supervision, employee recruitment and retention, motivation, job design, staff development, and issues of diversity. The role of agency boards of directors, their composition, and development is also examined.

SOW 5404+. Introduction to Social Work Research (3). This course introduces students to qualitative and quantitative research methods in order to provide an understanding of a scientific, analytic, and ethical approach to building knowledge for practice. Students' mastery of course content prepares them to develop, use, and effectively communicate empirically-based knowledge. Research knowledge is used by students to provide high-quality services; to initiate change; to improve practice, policy, and social service delivery; and to evaluate their own practice from an evidence-based perspective.

SOW 5432+. Evaluation of Social Work Practice (3). Prerequisite: SOW 5404 or equivalent. Major emphasis is given to the use of single systems designs in client assessment and evaluation. Students consider the philosophical and ethical aspects of an evaluative approach to treatment and examine the policy implications of professional participation (or lack thereof) in evaluation processes. Topics include the operational "diagnosis" of client problems; measurement and monitoring of symptoms, goals, and interventions; and analysis, interpretation, and reporting of case material for accountable social work practice. Issues of ethnicity, gender, sexual orientation, and disability are explored through application of course content to appropriate case examples.

SOW 5435. Social Program Evaluation (3). Prerequisite: SOW 5404. This course presents the historical and contemporary importance of social program evaluation and research methods. The course focuses on applied qualitative and quantitative evaluation methods that are useful to managers, public administrators, and policy analysts. Particular emphasis is placed on evidence-based procedures/methods that will be useful for social work administrators for designing and carrying out an evaluation of social programs and policies. How programs and policies can further the cause of social and economic justice for oppressed and disadvantaged groups is also explored.

SOW 5455. Grant Writing and Grant Management (3). This course covers the basics of proposals: purpose statements, background and justification, aims or objectives, personnel, time line, methods, budget, evaluation, and how to effectively manage grants once they are funded. The needs of disenfranchised groups or communities are discussed in this course, along with the particulars of proposals that may be most effective in meeting such needs.

SOW 5532r. Graduate Field Instruction I (5–10). (S/U grade only). Prerequisite: SOW 5308. This course is required for first-year graduate students and taken concurrently with coursework. Students are provided with a supervised generalist social work practice experience in a variety of settings. May be repeated to a maximum of ten semester hours.

SOW 5535r. Graduate Field Instruction II (6–12). (S/U grade only). This course is required for advanced graduate students and taken concurrently with Advanced Seminar in Social Work Practice. May be repeated to a maximum of twelve semester hours.

SOW 5537r. Field Instruction: Special Placement (3–12). (S/U grade only). Elective placement designed to assist the student in developing additional skills in social work practice in order to meet specialized and individual needs. May be taken only by special arrangement through the Office of Field Education. May be repeated to a maximum of twelve semester hours.

SOW 5603+. Social Work in Health Settings (3). This course focuses on social work practice in health settings from a "person-in-environment" perspective, preparing students with an understanding of the roles that social workers play in health settings; the structure of health care delivery systems; organizational and professional ethics and standards; challenges we face in health care policy; patient issues and how to help to address these issues. Specific knowledge and skills in a health care setting are addressed, including biopsychosocial assessments, chart documentation, treatment planning, and discharge planning.

SOW 5611+. Family Counseling in Social Work (3). This course introduces students to various theoretical models of family counseling and presents assessment and intervention strategies and techniques.

SOW 5614+. Family Violence Across the Life Span (3). This course, looking at violence across the life span, provides an ecological perspective emphasizing the interconnections between individuals experiencing violence and their social environments. Emphasis is placed upon broad coverage of all-important aspects of child abuse, incest, intimate partner violence, rape, and elder abuse. This course is appropriate for students who wish to gain skill in detecting and responding to incest situations for clients, sexual assault survivors, and victims of intimate partner violence or elder abuse.

SOW 5635+. The Social Worker in the Public School System (3). School social workers seek to maximize student success and promote optimal learning opportunities by helping to remove the variety of barriers that prevent school-based personnel and children from working to the best of their abilities. This course introduces the student to school social work practice and related issues. In order for students to experience the role of the school social worker as realistically as possible, both systematic and theoretical approaches to learning are presented.

SOW 5646+. Gerontological Social Work (3). This course introduces students to the field of social gerontology and gerontological social work. Topics include the demography, physical, cognitive, and psychosocial aspects of aging; health-care and social policies that impact older persons, caregivers, and the aging network of services; ways in which forms of oppression (such as ageism, sexism, racism, ablebodyism, beatism, and homophobia) impact our work with older people; as well as ways to promote dignity, self-determination, and socio-economic justice for older persons.

SOW 5648. Physical Aspects of Aging (3). This course covers age and health demographics, as well as attitudes toward aging and health. Topics include basic cellular or molecular theories of aging, how the human body's organ systems typically change over time, pathologies associated with aging, as well as psychological responses to normal and pathological changes.

SOW 5655+. Social Work with Children and Adolescents (3). Students in this course increase knowledge and understanding essential for effective therapeutic interventions in the psychological and behavioral disorders of children and develop special skills in selected intervention techniques and modalities in working with children in a variety of professional roles.

SOW 5656+. Child Welfare Practice (3). This course provides a framework of values, knowledge, and skills necessary to practice with vulnerable children and their families. The major focus is on social work in public child welfare in the State of Florida. The course utilizes an ecosystem perspective for understanding and assessing the special needs of at-risk children and families. Specific attention is on assessing families and children using the State of Florida's Safety Decision Making Method and other family assessment instruments.

SOW 5659+. Child Maltreatment and Child Welfare (3). This course provides students with the knowledge and skills related to the theory, research and implications of child and adolescent maltreatment for child development and well-being. Course content is presented within the context of child welfare practice and social work with children and adolescents in public agencies and programs. Issues related to children, families, and communities are covered and attention is given to working with ethnic minorities, women, gays and lesbians, and persons with disabilities. Particular attention is given to federal and state child welfare statutes including Chapter 39, Florida statutes including the Adoption and Safe Families Act and the range of services provided by the Department of Children and Families and other agencies.

SOW 5666+. Theory and Practice of Social Work in Criminal Justice Settings (3). This course focuses on criminological theories and on the development of both evidence-based and generalist social-work practice skills pertinent to working in criminal-justice settings, with individuals in the criminal-justice system. The course focuses on theory and practice for social workers employed in corrections, prisoner-reentry programs, or in juvenile-justice settings. The course covers the philosophy and practice of restorative justice and victim-offender mediation programs, in an effort to meet the needs of offenders and victims alike.

SOW 5712+. Substance Abuse and Misuse (3). This course is designed to provide fundamental knowledge of the aspects of substance misuse in American society. Students examine the etiology and epidemiology of substance misuse, treatment approaches, and major policies and programs relevant to the prevention and treatment of substance abuse through the use of readings, PowerPoint lectures, Web sites, and structured discussions. Special attention is given to substance use and misuse among specific populations including adolescents, older adults, women, racial and ethnic minorities, gays and lesbians, and persons with disabilities. The effect of substance misuse on families, communities, and social systems is examined utilizing a systems approach.

SOW 5745+. Seminar on Loss and Bereavement (3). This course is for students who wish to increase their knowledge and understanding of issues around loss, bereavement, dying, and death, and how we can live life to the fullest while addressing these challenges both personally and with our clients. The primary focus is on six topics: 1) theories of loss and grief; 2) personal feelings, fears, and expectations of the inevitable; 3) death and dying rituals from a cross-cultural perspective; 4) responses to loss and bereavement throughout the life cycle; 5) understanding different bereavement situations, such as suicide, SIDS, etc.; and 6) assessment and intervention strategies with individuals, families, and groups.

SOW 5785. International Social Work and Social Welfare (3). The course prepares students for international social-work practice and for transnational work with immigrants, refugees, international migrants, etc. It introduces international perspectives in the social-work field and offers varied examples of social-work practice in the U.S., Western and Central European and Caribbean nations. The course examines the impact of the global interdependence on social-work practice and policy and helps students learn to critically analyze varied practice approaches utilized in dealing with international welfare issues.

SOW 5807. Clinical Practice (3). Prerequisite: SOW 5308. This advanced practice course emphasizes development of clinical skills. Students refine their clinical skills, building on the research-based non-specific (common factors) components of therapeutic work (i.e. therapeutic alliance, empathy, goal consensus/collaboration, positive regard/affirmation, and genuineness) and specific factors (validated treatments). The course provides in-depth coverage of three empirically-based models; Solution Focused, Motivational Interviewing, and Interpersonal Therapy. Learning applications of techniques informed by these models provides opportunities to enhance professional use of self. The course examines similarities and differences among models and allows students to discern appropriate use of techniques, client populations, settings, and problem interactions. Students develop competency in the ethical and strength-based use of these models.

SOW 5908r. Directed Individual Study (1-4). (S/U grade only). May be repeated to a maximum of six semester hours.

SOW 5938r+. Social Work Seminars: Selected Topics (3). This course provides students with an understanding of a special topic and its impact on individuals, families, organizations, and/or communities. May be repeated to a maximum of nine (9) credit hours; repeatable within the same term.

SOW 5943. International Community Engagement (2). (S/U grade only). This course utilizes a service learning experience in an international social services organization to introduce students to international social work practice and a range of global social issues that shape human welfare and social development.

SOW 5971r. Thesis (1-6). (S/U grade only). Prerequisite: Instructor permission required. May be repeated to a maximum of semester hours.

SOW 6358. Measurement in Social Work Research (3). This course focuses on the development, testing, and use of measurement tools in social work practice research. It is a required course in the FSU College of Social Work doctoral curriculum. Emphasis is placed on understanding the conceptual relevance and operational clarity of theoretical constructs, and on the methods available for designing, evaluating, and validating instruments to measure them using best practices in psychometric research. Issues relevant to survey design research will be explored. Qualitative and quantitative techniques are examined for their varying contributions to item development and scale construction, and data analytic strategies for determining psychometric characteristics are explored.

SOW 6407. Survey Research Methods (3). This class equips students to design, conduct, and critique survey research. Particular attention is paid to surveying hard-to-reach or disenfranchised populations (methods and ethics involved) and reducing sources of error (i.e. sampling, coverage, measurement, non-response). Topics include: types of survey designs; survey sampling strategies and data collection; questionnaire construction (i.e. writing and ordering questions and response categories, pre-testing items); interviewing techniques; coding and analyzing data; and report/manuscript writing. Students gain practical experience by examining existing surveys and data.

SOW 6414. Introduction to Statistics in Applied Social Research (3). This course provides students with a firm foundation in descriptive statistics, univariate and bivariate inferential statistics, and multiple regression analyses. The course is designed as an applied statistics course and presented in three major sections: analysis of group differences, analysis of bivariate associations, and analysis of prediction models. Students learn how to use SPSS to clean and manage data, and how to analyze existing Social Work data sets. The course also introduces students to reporting data analysis plans and statistical results consistent with the expectations of peer-reviewed social work journals as well.

SOW 6418. Introduction to Linear Modeling for Applied Social Research (3). Prerequisite: An introductory statistics course. This course represents the Statistics II requirement for the Social Work Doctoral curriculum. The course is an extension of Statistics I and is designed to help students progress from knowledge and application of univariate, bivariate, and introductory multivariate analyses to more complex multivariate techniques commonly used in the social sciences to assess relationships among data derived from a variety of research designs. Specifically, this course builds on students' knowledge of multiple regression and ANOVA from Statistics I to address more advanced topics such as mediation and moderation in multiple regression, logistic regression, and the multivariate ANOVA-based family of analyses including factorial ANOVA, ANCOVA, MANOVA, and repeated measures ANOVA. Students learn how to use SPSS to clean and manage data, and how to analyze existing Social Work data sets.

SOW 6466. Social Work Research Using Secondary Data (3). This course introduces the concepts, strategies, and methods associated with secondary analysis of data and ways in which that data relates to social-work research. Both classroom and lab components of the course focus on acquisition, manipulation, and maintenance of public-use data and longitudinal analysis. Students demonstrate competence in problem conceptualization by defining a problem/research question in their social-science research area and by identifying and obtaining an appropriate public-use dataset to answer their proposed question. Students develop and demonstrate an understanding of issues in secondary analysis, as well.

SOW 6490. Introduction to Scholarly Writing (3). This course provides incoming doctoral students with 1) an introduction to the process of scholarly writing, 2) an opportunity to develop and hone their writing skills in the context of communicating effectively to the scientific community and, most important 3) an opportunity to develop and integrate the dimension of scholarly writer into their professional identity. The course is based on the assumption that scholarly writing is a way of thinking. As such, students learn how to pursue their writing goals from a framework of depth and critical thinking.

SOW 6492. Foundation Research Methods (3). This course is a seminar in theory construction and research design.

SOW 6494. Advanced Research Methods (3). Students in this course develop a more sophisticated understanding of the research enterprise. The course focuses on developing specific advanced competencies in conceptualization, sampling, design, measurement, data collection, and data analysis. Students also identify practical and ethical dilemmas common in research, especially as they relate to membership in vulnerable populations.

SOW 6495. Systematic Reviews in Social Work Research (3). This course familiarizes the student with the philosophy and methodology of designing and conducting systematic reviews of research relevant to social work. Topics include the selection and review of published research articles, methodological issues unique to particular problems and diverse populations, and the synthesis of literature in students' areas of specialization.

SOW 6496. Qualitative Research Methods (3). This course develops knowledge and skills in qualitative inquiry and identifies resulting strengths and weaknesses. Students identify the usefulness of qualitative methods in developing a knowledge base; the depth and detailed orientation and the field inquiry; and the usefulness of understanding sensitive topics that are often the focus of social-work research.

SOW 6499. Intervention Research in Social Work (3). This elective course focuses on a developmental approach to social-intervention research. It includes articulation of conceptual intervention models and their development, piloting, implementation, and dissemination. Micro-, mezzo-, and macro-level intervention models may be included as part of the course, depending on the students' interests. Background in both theory building and research methods is required.

SOW 6755. Theories and Models of Social Work Research (3). This second-semester doctoral seminar uses an evidence-tested framework based on a review of competing philosophies of science to prepare students to understand the role of theory in research, to critically appraise theories for their usefulness, and to utilize theory in conceptualizing research problems, developing research questions from these problems, and creating possible effective research models.

SOW 6775. Professional Issues in Social Work (3). This course promotes critical thinking about social work as a profession, its knowledge base, its place in the academy, its curricula, and issues for its educators. Specific topics include faculty scholarship and mentoring, service and contributing to the profession, comparison of educational delivery models, education evaluation and ethics, and the diverse roles of PhD social workers.

SOW 6904r. Reading in Social Work/Social Welfare (1-6). (S/U grade only). May be repeated to a maximum of twelve semester hours.

SOW 6909r. Directed Individual Study (1-6). (S/U grade only). May be repeated to a maximum of twenty semester hours.

SOW 6916r. Supervised Research (1-5). (S/U grade only). Contracted research or scholarship directed by student's choice of faculty. May be repeated to a maximum of six semester hours.

SOW 6930. Teaching Seminar and Practicum (3). (S/U grade only). This course is designed to prepare students for college teaching. Students are assigned as Teaching Assistants in foundation social work courses while taking this class. The aim of the course is to familiarize students with pedagogical theories and strategies for development and delivery of course content, course management, and assessment. Students practice skills in the classroom and receive guidance and feedback from experienced instructors.

SOW 6938r. Selected Topics in Social Work (3). May be repeated to a maximum of nine semester hours as topics change.

SOW 6942r. Supervised Teaching (1-3). (S/U grade only). May be repeated to a maximum of five semester hours.

SOW 6945r. Practicum in Applied Research (2-6). This two-part course is designed for students to engage in supervised research. This course helps students move from having a substantive area to developing a research agenda, planning, and executing their own work. Students are encouraged to select a topic relevant to their substantive area of interest. In the first semester, students develop a working relationship with an individual faculty member; simultaneously, students attend a seminar in which they propose a project, prepare a work plan, and prepare an IRB application. In the second semester, the individual faculty member supervises the students' implementation and write-up of the research project.

SOW 6960. Preliminary Preparation (0-12). (S/U grade only) This course is designed to allow doctoral-level students to register for course credit hours while studying and preparing to take the preliminary doctoral examination (SOW 8964r).

SOW 6980r. Dissertation (1-18). (S/U grade only). May be repeated to a maximum of thirty semester hours.

SOW 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

SOW 8976r. Master's Thesis Defense (0). (P/F grade only.)

SOW 8985r. Dissertation Defense (0). (P/F grade only.)

SOCIOLOGICAL ANALYSIS: see Sociology

Graduate Department of SOCIOLOGY

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <http://coss.fsu.edu/sociology/>

Chair: Kathryn Tillman; **Professors:** Barrett, Brewster, Burdette, Carlson, Padavic, Reynolds, Rohlinger, Schrock, J. Taylor, M. Taylor, Tillman, Ueno; **Associate Professors:** Carr, Davis, Sanyal; **Assistant Professors:** Buggs, Hauer, Homan, McFarland, Singh, Waggoner; **Teaching Faculty III:** Lessan, Munson; **Teaching Faculty I:** Roach; **Professors Emeriti:** Eberstein, Fendrich, Ford, Hardy, Hazelrigg, Isaac, Kinloch, Martin, Nam, Orcutt, Quadagno; **Affiliate Faculty:** Chiricos, Gundogan, Miles, Milton, Perez-Felkner, Schwabe

The Department of Sociology offers graduate degree programs leading to the Master of Science (MS) and Doctor of Philosophy (PhD) degrees. The department's primary objective is to enable students in our graduate programs to become scholars who are able to conduct high-quality, innovative research and to provide the education and training that will serve as a basis for independent or collaborative research, depending on the individual graduate's professional goals. Our graduates typically secure jobs as professors at research universities and liberal arts colleges or as researchers in non-profits and government agencies. The Master of Science in Applied Social Research and Master of Science in Sociology with a Major in Aging and Health may be completed in one calendar year if entered in the Fall semester. Requirements for the degrees as well as other rules and procedures are listed in the *Guide to Graduate Studies in Sociology*, a document that is updated as changes are made in the program. Information about the Department of Sociology, its graduate programs, and faculty is available at <https://coss.fsu.edu/sociology/grad-guide>.

The Department of Sociology is located in the Bellamy Building in the heart of Florida State University campus and includes such resources as the Meyer Nimkoff Conference Room, the Sociology Library, the departmental computer laboratory for graduate students, student workspaces, and a supply/mail room where students have individual mailboxes. Some faculty also are affiliated with the **Center for Demography and Population Health** (also located in Bellamy) and the **Pepper Institute on Aging and Public Policy**, where they and their students have access to additional facilities.

Requirements for Admission

Minimum admission requirements are established by the state of Florida and enforced by the Graduate School. The departmental minimum requirement for entry into all Sociology graduate programs is a 3.0 grade point average for the last two years of undergraduate study and adequate GRE scores comparable to both present and past cohorts. It is also desirable for applicants to have received a "C" or higher grade in a college-level course in statistics. All applicants must submit three letters of recommendation, an official copy of all transcripts, a writing sample, and a statement of purpose. Admission to the program is decided by the Director of Graduate Studies who considers the recommendations of the Graduate Admissions and Financial Aid Committee.

Applications must be received by January 1st of the year preceding their proposed entry into the graduate program. Application for admission may be made online at <https://coss.fsu.edu/sociology/graduate>. Some materials must be submitted both to sociology and to the Florida State University Graduate School Admissions Office. Consult the departmental website or contact the department at (850) 644-6416 for further information.

Financial Aid

The Department of Sociology makes every effort to provide financial assistance for students seeking the PhD degree. Financial aid possibilities include fellowships, teaching assistantships, and research assistantships. Students who receive financial assistance and make expected progress may receive support for up to four years.

Master's Degree Programs

Master of Science with a Major in Applied Social Research Option

A total of thirty-three semester hours are required, with a minimum of twenty-one hours of graduate course work that must be taken on a letter-grade basis in the Department of Sociology. Additional hours may be taken in sociology or in other appropriate graduate programs with approval of the sociology graduate director.

A minimum of fifteen semester hours of research methods and statistics courses must be taken, choosing from the following:

SYA 5305 Introduction to Quantitative Research Methods (3)

- SYA 5315 Introduction to Qualitative Research Methods (3)**
SYA 5406 Multivariate Analysis (3)
SYA 5407 Advanced Quantitative Methods (3)
SYA 5455 Social Statistics and Data Analysis for MPH (3)
SYD 5133 Population Data
SYD 5135 Techniques of Population Analysis (3)
SYD 5137 Fundamentals of Epidemiology (3)
 or an approved comparable course from Sociology or another department.

Master of Science with a Major in Aging and Health Option

A total of thirty-three semester hours is required, with a minimum of twenty-one hours of graduate course work that must be taken on a letter-grade basis in the Department of Sociology. The following courses are required:

- One methods/statistics course from the above list of MASR methods/statistics course options.
- One Aging course:

SYA 6933 Aging and Life Course (3) [or approved substitute]

And one Health course, or approved substitute, such as:

SYD 5136 Life Course Epidemiology (3)

SYD 5215 Health and Survival (3)

SYO 5405 Health Institutions and Social Policy (3)

SYO 5416 Stress and Mental Health (3)

SYO 6407 Race, Ethnicity, and Health (3)

Traditional Master's Option

A minimum of thirty-four semester hours is required, with at least twenty-one hours on a letter-grade basis in graduate level courses in the Department of Sociology. Students must satisfactorily complete the following list of required courses and have their master's paper approved by their supervisory committee. Required courses are as follows:

SYA 5018 Classical Social Theory (3)

SYA 5305 Introduction to Quantitative Research Methods (3)

SYA 5315 Introduction to Qualitative Research Methods (3)

SYA 5406 Multivariate Analysis (3)

SYA 5515 Sociological Research Practicum (1)

SYA 5516 Reporting Sociological Research (1)

SYA 5625r Proseminar (1) (S/U grade only)

SYA 6933 MA Paper Seminar (3).

Elective courses: a minimum of nine semester hours

Master's Research Paper

To receive a MS degree in sociology (traditional option only), students must successfully complete a master's research paper. The master's research paper entails a research project leading to an article-length manuscript (about twenty-five pages.) The paper must be submitted to and be approved by a committee of three sociology faculty members.

Doctoral Degree

Formal admission to the doctoral program requires the approval of the Graduate Admissions and Financial Aid Committee and Graduate Director. Students with master's degrees from other institutions enter the doctoral program after they have completed the departmental core requirements and after their previous graduate work has been evaluated and approved by the faculty. Students officially become a **candidate** for the PhD degree upon successful completion of the major area preliminary examination. Students admitted to the doctoral program must complete the following for the doctoral degree:

Complete appropriate courses in student's program area and a seminar in teaching sociology

A written examination in the student's major program area

Teaching of an undergraduate course

A doctoral dissertation

Requirements

Doctoral students are required to complete five courses in their selected area of study:

Demography addresses issues related to birth, marriage, health, death, and migration (within and between nations), including a focus on how demographic events affect and are affected by social institutions and processes.

Health and Aging addresses issues raised by several social phenomena, including changing life course patterns, aging populations, and social patterning

of mental and physical health. Topics examined in courses include the transition to adulthood, work and retirement later in life, intergenerational relationships, aging-related social policies, and gender, race, and class differences in health.

Inequalities and Social Justice involves the study of race, gender, and class inequality, social movements mobilized to effect social change, inequality in work and labor markets, and political processes contributing to or helping ameliorate inequality.

To receive the PhD degree, students must complete requirements beyond the master's degree and/or departmental core curriculum, as well as teach an undergraduate sociology course. Additional requirements are as follows:

SYA 5407 Advanced Quantitative Methods

SYA 6933 Dissertation Proposal (1)

Three semester hours of SYA 6660, Teaching at the College Level in Sociology

Three semester hours of SYA 5946r, Supervised Teaching

Fifteen semester hours of five major area courses

Nine semester hours of three sociology elective courses

Written preliminary exam in major area

Doctoral dissertation

Definition of Prefixes

DEM—Demography

SYA—Sociological Analysis

SYD—Sociology of Demography/Area Studies/Sociological Minorities

SYO—Social Organization

SYP—Social Processes

Graduate Courses

Core

SYA 5018. Classical Social Theory (3). An introduction to the works of major social theorists in the nineteenth and early twentieth centuries, concentrating mostly on Marx, Durkheim, and Weber. How did they prefigure the development of sociology as a social science? How do their perspectives relate to such early American theorists as W.E.B. DuBois and Charlotte Perkins Gilman?

SYA 5305. Introduction to Research Methods (3). Reviews rationales for performing sociological research and examines the relationship between sociological theory and research design. Reviews the dimensions of research, e.g., measurement theory, definition and concept formation, strategies of theory testing, adequacies and deficiencies of different research designs, statistical and causal inference.

SYA 5315. Qualitative Research Methods in Sociology (3). A seminar in qualitative research methods that allows for the systematic collection and analysis of (non-numeric) observational and interview data obtained from individuals, social groups and organizations.

SYA 5406. Multivariate Analysis (3). Prerequisites: SYA 5305 and 5455 or comparable knowledge. Covers the general linear model and application of a variety of techniques derived from this model to the analysis of data common to social science. Techniques include partial correlation, multiple regression, analysis of variance, analysis of covariance, and contingency table analysis. Reviews assumptions of models and methods for handling violations of the assumptions.

SYA 5407. Advanced Quantitative Methods (3). Prerequisites: SYA 5305, 5406, 5455. The fourth course in a sequence. Deals with recursive and non-recursive structural equation models, the identification problem, and issues in estimation and statistical inference. Additional topics include time-ordered data (time-series and panel models), the causal approach to measurement error and latent variables equation context, and current developments in quantitative analysis in sociology.

SYA 5458. Social Statistics and Data Analysis for Public Health (3). This course provides students with the basic data management skills necessary for carrying out quantitative analysis and presenting the results to both lay and professional audiences in public health.

SYA 5515. Sociological Research Practicum (0-3). (S/U grade only). Prerequisites: SYA 5305, 5455. Corequisite: SYA 5971r. This course provides hands-on experience in formulating questions for sociological research and developing a master's paper research project. In concert with a faculty supervisor, students write a report of a theoretical or empirical problem of sociological relevance. Students must simultaneously enroll for two credit hours in Master's Paper Research, SYA 5971r, with a supervising faculty member.

SYA 5516. Reporting Sociological Research (1-3). (S/U grade only). Prerequisite: SYA 5515. In this course, students critique each other's work, revise drafts, and arrive at a final version of their master's research paper. Students also prepare to present their papers at professional conferences or submit them for publication. Overall, the seminar develops students' skills as writers, critics, editors, and presenters of academic research.

SYA 6936r. Selected Topics in Research Methods (3). Prerequisite: SYA 5406. This seminar is devoted to current issues in sociological methods. May be repeated to a maximum of nine semester hours.

Demography

DEM 5906r. Directed Individual Study (1–3). (S/U grade only). Readings in an area of demography with subject tailored to the student. May be repeated to a maximum of six semester hours.

DEM 5930r. Special Topics in Demography (3). Prerequisite: SYD 5135. May be repeated to a maximum of nine semester hours.

DEM 5972r. Master's Research Paper in Demography (3–6). (S/U grade only). Preparation of a research paper which draws on theory, methods, and subject matter of demography and which meets the standards for submission to a professional journal. Topic varies with student. May be repeated to a maximum of six semester hours.

SYD 5045. Introduction to Demography (3). Introduces the scope and content of population study, with attention to demographic theories, data, and research; factors affecting population change, mortality, fertility, mobility, and population composition and distribution; and empirical and policy consequences of population dynamics.

SYD 5046. International Population Dynamics (3). Prerequisite: Graduate student status. This seminar emphasizes the exploration and mastery of literature from demographic and other social science professional journals, related to issues of population dynamics in comparative global context. In addition to discussion and writing related to these readings as specified in the syllabus, seminar participants also complete independent original research projects involving synthesis of this literature, formulation of an original hypothesis, and where appropriate, testing of such a hypothesis through original empirical data analysis. Such products of research ideally may be presented as conference papers and/or submitted for journal publication.

SYD 5105. Population Theory (3). A seminar on historical and contemporary population thought and theory, with emphasis on critical evaluation of different ideas and theoretical frameworks useful for demographic analysis.

SYD 5133. Population Data (3). This course is a graduate seminar and core entry course for the applied Master of Science in Demography Interdisciplinary degree. It covers acquisition of data from censuses, vital statistics, and surveys; basic demographic and statistical techniques to evaluate data quality and make estimates and projections; and application of such data to decisions in business, government, education, health care and other applied settings.

SYD 5135. Techniques of Population Analysis (3). This course covers techniques of demographic data collection and evaluation as well as measurement of population processes, composition, and distribution, and social and economic characteristics of population.

SYD 5215. Health and Survival (3). Reviews conceptual and theoretical approaches, measurement problems, analytical strategies, and literature in the areas of morbidity and mortality.

SYD 5235. Population Mobility (3). This course concerns spatial mobility within and among human populations, including urbanization and other internal migration as well as international migration. This seminar reviews theories to explain population mobility and also explores consequences of such movements for other features of social organization and change. Original independent research is required as part of the course.

SYD 5225. Fertility (3). Addresses global trends in human fertility, conceptual approaches to the study of fertility, and policies that affect it.

SYO 5177. Family Demography (3). This course examines the changes in family behaviors and household relationships from a demographic perspective. Materials are drawn not only from demographic literature on the family, but also from sociology, economics and history. The focus is on issues such as union formation and dissolution, family relationships, childbearing, parenthood, and work, to consider explanations for changing family forms, focusing primarily upon post-World War II America.

Health and Aging

SYD 5136. Life Course Epidemiology (3). This course integrates classic social epidemiology and life course sociology to account for historical contingencies and individual biographical experience, in addition to current circumstances, to explain social inequalities in the distribution of chronic illnesses and noncommunicable diseases.

SYO 5416. Stress and Mental Health (3). This course in the sociology of mental health and substance problems focuses on the role of social stress and the stress process. Theories and measurement of disorder and of stress exposure are considered, along with evidence on factors that increase and decrease risk for mental health and substance use problems.

SYO 6407. Race, Ethnicity and Health (3). This course reviews current research and theory on the connections between race and/or ethnic status in regard to physical and mental health. Students in the seminar review scholarly work in multiple disciplines and professions to identify empirical trends and theoretical explanations for patterns that these trends reveal.

SYP 5738. Aging Policies and Services (3). This course examines current federal and state policy, and the dilemmas faced by older people for which these policies are needed. The course uses both political economy and the long term care continuum including independence and dependence to examine these policies and dilemmas. The course addresses policy implementation and impact from the perspective of the political arena, and the impact on the aged and their families. Some examples of policy issues include income security, health insurance, transportation, and dementia care.

Inequalities and Social Justice

SYD 5705. Sociology of Race and Ethnicity (3). This seminar examines sociological concepts and theories utilized to explain dominant-subordinate relations in society. Applies various frameworks to the study of contemporary U.S. ethnic and race relations.

SYD 5817. Contemporary Theories of Gender (3). The course critically examines contemporary gender theories; explores how feminist theorizing affects mainstream social theory; and asks how gender intersects with other forms of structured inequality (race, ethnicity, sexuality, social class). Topics include core themes in gender scholarship; affinities and dialogues with other traditions; origins of feminist theories; conceptualizing gender and the field of gender relations; and theorizing on substantive and political issues.

SYO 5306. Political Sociology (3). Offers intensive study of sociopolitical processes, structures, and institutions of modern society. Topics include relations of power, authority, and legitimacy; state formations; collective action and revolution; structures of domination and hegemony; socialization and political identity formation; and processes of global integration.

SYO 5335. Sociology of Political Economy (3). Broad overview on the macro-sociology of political and economic institutions and historical dynamics governing their interplay. Issues include perspectives in political economy, economic organization in the historical development of U.S. capitalism; economic cycles, waves, and periodization in capitalist development; theories of the state; institutionalized and non-institutionalized political processes; politics of class and the labor movement; and macro-distributional processes (market and non-market) that foster structured inequalities.

SYO 5376. Sociology of Gender and Work (3). A political-economic analysis of the organization of work, production and reproduction of labor, and linkages between work in the market and work in the home relative to gender. Topics include occupational sex segregation, segmented labor markets, dialectics of paid and unpaid labor, comparable worth, bureaucracy, emotional work, domestic labor, and strategies for change.

SYO 5535. Inequalities: Race, Class, Gender (3). This seminar reviews theories of inequality in contemporary societies. Research on inequality and social mobility in the U.S. and other nations is also reviewed, with a focus on conceptualization and measurement.

SYO 5547. Race and Gender in Organizations (3). This seminar examines the forces that create, maintain, and erode inequalities for racial minorities, women, and immigrants in organizations, with an emphasis on work organizations. Course material draws from theory and research sociology, organizational behavior, social psychology, and legal studies.

SYO 6255. Sociology of Education (3). This course provides an overview of several central themes in the sociology of education – the relationship between educational systems and capitalism, trends in educational inequalities, school segregation, attempts to reform public education, and educational inequality in comparative perspective.

SYO 6538r. Advanced Research Seminar In Stratification and Inequality (3–9). An advanced seminar where students work closely with a faculty member to explore the latest theory, research, and developments in social stratification and inequality. May be repeated to a maximum of nine semester hours.

SYP 5005. Social Interaction (3). This course addresses the three major sociological perspectives on social interaction—symbolic interactionism, dramaturgy, and ethnomethodology—focusing on how these approaches address epistemology, time, interaction rules, intersubjectivity, identity, emotions, language, social organization, micropolitics, inequality, reproduction, and politics and social change.

SYP 5065. Sexuality over the Life Course (3). This course introduces the sociological literature on sexuality. Drawing from social psychological theories and life course perspective, the following questions are pursued: (1) How do sexual behaviors change across life stages? (2) What influences and is influenced by sexuality in each life stage? and (3) How does sexuality influence life trajectories? The course pays special attention to social inequality issues.

SYP 5305. Collective Behavior and Social Movements (3). Seminar on theories and research about collective behavior and social movements. Particular movements are studied relative to competing theories of mobilization.

SYP 6356. Sociology of the Contemporary Women's Movement (3). Seminar reviews theories of social movements relative to the second wave feminist movement. Issues include labor market/workplace equality, violence against women, economic, political and cultural issues (poverty, family, marriage, sexuality) relative to women's collective organization and mobilizing.

General

SYA 5357. Developing Sociological Research (3). (S/U grade only). In this course, master's students investigate how sociologists develop research projects.

SYA 5625r. Proseminar in Sociology (0–3). (S/U grade only). This course introduces students to issues they will confront as professional sociologists in colleges and universities and government or private contexts. Content reflects developments in the discipline. May be repeated to a maximum of three semester hours.

SYA 5907r. Directed Individual Study (3). (S/U grade only). Prerequisite: Instructor permission and departmental chairperson. May be repeated to a maximum of nine semester hours.

SYA 5909r. Directed Individual Study (1–3). (S/U grade only). Prerequisite: Instructor permission and departmental chairperson. Credit can vary. May be repeated to a maximum of nine semester hours.

SYA 5912r. Supervised Research (1–5). (S/U grade only). May be repeated to a maximum of five semester hours.

SYA 5946r. Supervised Teaching (1–5). (S/U grade only). May be repeated to a maximum of five semester hours.

SYA 5971r. Master's Paper Research (0–6). (S/U grade only). Research project leading to a paper that is required for the master's degree. May be repeated to a maximum of six semester hours.

SYA 6660. Teaching at the College Level in Sociology (3). A graduate seminar focusing on pedagogical issues and practical problems in teaching sociology at the college and university levels.

SYA 6933r. Selected Topics in Sociology (3). May be repeated to a maximum of nine semester hours.

SYA 6980r. Dissertation (1–12). (S/U grade only). This course endeavors to provide competency in conducting original research that adds to sociological knowledge.

SYA 8962r. Major Area Doctoral Preliminary Exam (0). (P/F grade only.)

SYA 8967r. Preparation for Major Area Preliminary Exam (1–12). (S/U grade only). A mechanism for graduate students to use in preparing for the required comprehensive exam in their major area of study. May be repeated to a maximum of twenty-four semester hours.

SYA 8976. Master's Paper Completion (0). (S/U grade only). A method for showing approval of the required master's paper.

SYA 8985r. Dissertation Defense (0). (P/F grade only.)

SYP 5105. Theories of Social Psychology (3). Course examines the major theoretical orientations in contemporary social psychology. Special attention is given to sociologically relevant perspectives such as symbolic interactionism, exchange theory, social learning theory, expectations states/status characteristics theory, emotions work theory, and Goffman's dramatization theory.

SPANISH LANGUAGE:
see Modern Languages and Linguistics

SPANISH LITERATURE:
see Modern Languages and Linguistics

Graduate Department of SPORT MANAGEMENT

COLLEGE OF EDUCATION

Web Page: <http://education.fsu.edu/sm>

Chair: Jeffrey D. James; **Associate Chair:** Michael Giardina; **Professors:** James, Giardina, Newman; **Associate Professor:** Rodenberg; **Assistant Professors:** Du, Kim, Xue; **Teaching Faculty II:** Flanagan, Nobles, Pappas; **Teaching Faculty I:** O'Daniel

The mission of the Department of Sport Management is to provide high quality education aimed at producing qualified professionals for the sport industry, public schools, colleges, and universities. The primary goals of the department are to (a) provide excellence in instruction in preparing qualified professionals; (b) pursue research and other scholarly endeavors that advance the theory and practice in sport settings; and (c) provide high quality leadership and service that advance professional organizations in the three programs, as well as benefit Florida State University.

Programs of study in the department lead to the Master of Science (MS) or Doctor of Philosophy (PhD) in Sport Management. The department offers a Combined BS/MS Pathway that provides an opportunity for students to complete Sport Management graduate courses that will be counted toward fulfillment of the Bachelor of Science (BS) degree requirements and toward fulfillment of the MS degree requirements. The department offers two Joint Graduate Pathways in Law and Sport Management, a JD/MS and a JM/MS, in conjunction with the College of Law.

Sport Management

Combined Bachelors/Master's Pathway

The combined Bachelor of Science (BS)/Master of Science (MS) degree pathway in Sport Management provides an opportunity for academically talented students to complete graduate Sport Management courses (12 credit hours) that will be counted toward fulfillment of the BS degree requirements, and also toward fulfillment of the MS degree requirements. With the competitive nature of the sport industry, graduates increasingly are expected to have a higher level of training, and to compete for more than an entry-level position must already have some practical work experiences. The non-thesis Master's degree includes service learning hours, requires completion of practicum hours, and provides additional training and instruction to position students for positions in the sport industry beyond the entry level. In a highly competitive industry, the combined degree provides an option for students seeking more than entry level jobs. In an industry where having a Master's degree does provide a competitive advantage, a combined pathway is expected to be a viable option for undergraduate Sport Management students.

Master's Program

The Master of Science (MS) degree in Sport Management emphasizes principles of business as applied in the sport industry (e.g., marketing, finance, management, law), as well as research-oriented courses befitting a graduate program. In addition, an array of electives reflects prominent career paths in the industry (e.g., collegiate athletics, professional sport). The non-thesis track MS program consists of thirty-six credit hours; a thirty-four-hour thesis-track option is also available for those who wish to pursue a research project in a particular sport issue, or to prepare for doctoral-level work.

This degree program is designed to provide students with an advanced understanding of Sport Management and the various components that comprise this area of study. Although course content will focus on the applied aspects of Sport Management, students will be required to become knowledgeable of the current literature, both applied and research based. In order to enhance the student's practical experiences, appropriate internships are a required element of the program of study. This specialization prepares individuals with the appropriate background for employment in an entry or mid-level position.

Doctoral Program

The department offers the Doctor of Philosophy (PhD) degree with a major in Sport Management. The program has a seminar series emphasizing research in core areas of Sport Management, as well as a substantial research method and an analysis component. The degree will consist of a minimum of eighty credit hours, including all examinations and the twenty-four dissertation hours.

The program is designed to prepare individuals for employment in universities and colleges as researchers and teachers, as well as for administrative leadership positions in a variety of settings, including private business, professional and college athletics, and administration in higher education. Research is a major endeavor and students concentrate on the understanding and inter-

pretation of research literature as well as the ability to conduct both theoretical and applied studies. The doctoral program is designed for individuals who wish to pursue careers in higher education as a researcher and graduate faculty member. The program of study has been designed to emphasize the theoretical knowledge base and research paradigms needed to conduct academic research, as well as the knowledge base required to supervise graduate student research. The research emphasis of students in the program will normally be directed toward the testing of theoretical questions and models pertaining to the sport industry. The program affords the student an opportunity to take doctoral level courses in several Sport Management content areas, as well as gain valuable teaching experience prior to graduation.

Admissions

All applicants for advanced degrees in the department must take the Graduate Record Examination (GRE) and present acceptable scores. Three letters of recommendation addressing capabilities for graduate study, a letter of intent, and a current résumé are also required. Recommendation for admission to a program will be determined by the faculty in the specialization to which the student is applying. Additional requirements may go above and beyond the minimum University or departmental requirements.

Sport Management. Applicants for the master's degree program must have a bachelor's degree from an accredited institution and present GRE scores. They may be admitted with a 3.0 upper-division grade point average (GPA) (or higher) and the requisite GRE scores (contact the department office for more information). Official GRE scores must be submitted in order for an application to be considered complete. Applicants to the doctoral program must have a master's degree from an accredited institution and present GRE scores that meet the minimum requirements. Applicants to the doctoral program must have a department faculty sponsor to be admitted. Meeting the minimum requirements does not guarantee admission. For more details on all programs and admission standards, please refer to the departmental website at <http://education.fsu.edu/sm>.

Definition of Prefixes

APK—Applied Kinesiology

PET—Physical Education Theory

SPM—Sports Management

Graduate Courses

APK 5121. Sport and Exercise Psychology for Coaches (3). This course focuses on the theoretical and practical knowledge needed in coaching various sports, emphasizing critical thinking and application of scientific findings.

PET 5235. Motor Learning for Coaches (3). This course offers coaches a better understanding of the processes underlying the learning and performance of skill movements. Focus is on how humans learn skilled actions and how the principles of motor performance and learning can be useful in coaching. Topics cover theories and principles explaining motor behavior and psychological factors related to and/or affecting motor-skill acquisition or performance.

PET 5735. Advanced Coaching (3). This course covers key topics pertaining to coaching, from developing a coaching philosophy to managing a team effectively. Topics include the eight domains of coaching competencies, thus addressing the National Standards for Sport Coaches.

PET 6931r. Advanced Topics (1–4). This course integrates facts, principles, and theories into a practical philosophy in the area of specialization of instructor teaching the course any given semester. May be repeated to a maximum of twelve semester hours.

SPM 5021. Global Sport Venues (3). This course gives students opportunities to tour sport venues, meet international sport managers, attend events, and discuss current and future issues surrounding venue and event management in the international sport industry.

SPM 5022. Global Issues in Sport Management (3). This course gives students opportunities to identify and discuss current issues that are prevalent in the sport industry at the international level.

SPM 5027. Diversity in Sport (3). This course examines the role and impact that ethnicity, racism, gender, and other diversity topics have had in the world of sport. Students are introduced to the realities of bias and prejudice that exist and perpetuate within sport, while seeking to foster understanding and appreciation for diversity in sport.

SPM 5055. Sport, Culture, and the Body (3). This course encourages students to critically examine the cultural politics and pedagogies of the active, sporting body. It offers a theoretical and empirical survey of body cultures and their related movements, politics, types of modification, and moral panics surrounding issues of in/activity.

SPM 5102. Research Methods in Sport Management (3). This course covers methods and techniques used in physical-education research, including the use of library materials and writing techniques.

SPM 5106. Facility Management in Sport (3). This course studies sport/multi-purpose public assembly facility management. This course includes design, planning processes, funding, construction, and maintenance.

SPM 5116. Strategic Management for Sport Organizations (3). This course examines the fundamentals of strategic management theory important for effective leadership in the sport industry.

SPM 5117. Sport Leadership (3). This course provides students with a critical overview of theory and research in leadership within the field of sport management. Focusing on such topics as ethical leadership and strategic vision to group dynamics and diversity, the course examines the ways in which different leadership approaches, skills, and dynamics influence a sport organization. The course also focuses on translating academic literature in the field to practical/industry settings.

SPM 5158. Athletic Administration (3). This course is designed to provide information regarding the various components and activities in the organization and administration of athletic programs for prospective athletic administrators.

SPM 5206. Sport Sponsorship and Sales (3). This course examines the relationship between sport, corporate sponsorship, and strategies for selling sponsorship packages.

SPM 5308. Marketing Sport (3). This course focuses on topics and issues involved in the marketing of sport and sport services. Particular attention is given to how a sport product is distinct from other products and services. The course includes an in-depth study of sport consumer psychology.

SPM 5350. Athlete Recruitment (3). This advanced course deals with the collegiate recruiting of athletes. Topics cover all facets of recruiting, including evaluation, compliance, technology, visits, commitments, and issues.

SPM 5405. Sport and the Media (3). This course examines the unique role and impact of the media on the sport industry. Identification of the grand spectrum of activities and mediums comprising the media is explored. The ever-growing role of print, radio and television broadcast, and the Internet are investigated. This course also orients students to the academic and professional literature accessible in the field of sport management.

SPM 5508. Fiscal Management in Sport (3). This course covers principles and factors involved in the fiscal management of athletic/sports programs. This course also addresses purchasing, budgeting, risk management, operational procedures, and auditing guidelines.

SPM 5605. Sport Governance (3). This course applies a variety of organizational behavior topics to sport organizations, preparing students who wish to occupy administrative roles in the sport industry.

SPM 5706. NCAA Compliance and Institutional Control (3). This course prepares students for current NCAA rules, policies, enforcement procedures, and compliance strategies.

SPM 5716. Risk Management in Sport and Physical Activity (3). This course provides a comprehensive overview to risk management in sport and physical activity. The identification, evaluation, and control of loss to personal and real property, clients and students, employees and the public are addressed. Loss may result in injury, death, destruction of property, financial failure, or harm to reputation. Students become familiar with systems used in assessing risk in the sport industry.

SPM 5726. Issues in Sport Law (3). This course is an integration of the various areas involved within sport pertaining to the legal liability of coaching, facility management, and risk management.

SPM 5906r. Directed Individual Study (1–3). (S/U grade only). This course allows students to work with faculty supervision to complete an independent project pertaining to a particular topic of interest. May be repeated to a maximum of twelve semester hours. May be repeated within the same semester.

SPM 5907. Professional Development in Sport (3). This course provides an in-depth examination of the sports industry from the perspectives of leadership, personal relations, networking, industry research, and internships. Students conduct industry analyses, interview selected industry professionals, engage with case study research, and produce a personal action plan and portfolio.

SPM 5912r. Supervised Research (1–4). (S/U grade only). This course allows students to work with faculty supervision to complete research pertaining to a particular topic of interest. May be repeated to a maximum of sixteen semester hours.

SPM 5930. Issues in Sport Management (3). This course familiarizes students with a variety of significant issues currently facing managers in the sport industry and increases students' abilities to critically examine these issues, formulate effective argumentation, and provide recommendations. The course develops students' abilities to think critically, challenge, and argue by teaching a variety of ethical and philosophical decision-making skills. Students also hone their skills through class discussion, presentations, and writing assignments.

SPM 5940r. Field Laboratory Internship (1–8). (S/U grade only). This course allows students to work with faculty supervision to complete a field experience pertaining to a particular topic of interest. May be repeated to a maximum of sixteen semester hours as content changes and with instructor permission.

SPM 5942r. Supervised Teaching (1–4). (S/U grade only). This course allows students to work with faculty supervision to complete supervised teaching pertaining to a particular course. May be repeated to a maximum of sixteen semester hours as topics vary.

SPM 5947r. Practicum in Sport Management (3–12). This course provides students the opportunity for practical experience in various areas of sport management. An open forum is established so as to provide an insight into various related topics. May be repeated to a maximum of twelve semester hours.

SPM 5971r. Thesis (1–6). (S/U grade only). In this course, students enroll for thesis credit while working on a thesis project, culminating in the production of a thesis. May be repeated to a maximum of twelve semester hours.

SPM 6006. Organizational Theory in Sport (3). Prerequisites: EDF 5400 and SPM 5102. This doctoral seminar focuses on organizational theory in sport administration settings and prepares students to teach and research in the area of human resources and organizational theory of sport.

SPM 6007. Leadership and Organizational Behavior in Sport (3). Prerequisites: EDF 5400 and SPM 5102. This doctoral seminar focuses on leadership styles and theories of organizational behavior in the sport setting and prepares students to teach and research in these areas.

SPM 6008. Foundations in Sport Administration (3). This course examines the role and impact of the sport industry and helps students identify activities and opportunities in sport management. This course also orients new graduate students to the academic and professional field of sport management.

SPM 6017. Globalization, Development, and Sport (3). This course offers an interdisciplinary examination of the globalization of sport. By contrasting local and global dimensions, students examine the social, cultural, technological, and economic structures that constitute, and are constituted by, the expanding sports industry. Using theories from a number of disciplines, students in this course consider issues and problems related to the globalization of sport.

SPM 6046. Sport and Politics (3). This seminar examines how dominant political, cultural, and economic formations influence, and are influenced by, practices and conceptions of sport and physical activity in their myriad formations (e.g., team sport, leisure, games, tourism, exercise, and other forms of bodily [and virtual] gambol). Students develop an in-depth understanding of how political systems and practices shape our lives, as well as more pertinently, how in both historical and contemporary contexts, these systems structure bodily conduct within the frameworks of organized sport and physical activity.

SPM 6208. Seminar in Sport Ethics (3). This course assists students in self-evaluating, examining, and developing philosophical and moral reasoning skills. Major moral/ethical theories and frameworks outside and pertaining to sport are researched and discussed. Students experience the ethical decision-making process through opportunities for critical thinking.

SPM 6309. Seminar in Sport Marketing (3). In this course, emphasis is on discussion and critical analysis in sport marketing theory, research, education, and current issues relative to social, cultural, political, and ethical issues in sport marketing.

SPM 6507. Seminar in Sport Finance (3). This course assists doctoral students in understanding the theory, concepts, and frameworks of sport finance research. Includes a discussion of major financial frameworks related to and outside of sport and prepares those aspiring to teach undergraduate sport-finance courses.

SPM 6517. Fundraising in Sport (3). This course introduces students to the “art” and “science” of fundraising, an endeavor about people, personalities, and personal relationships. The assigned readings give students the tools needed to successfully engage in fundraising in profit and nonprofit organizations.

SPM 6700. Seminar in Sport Management Research (3). This course examines research methods frequently utilized in sport management. Students critically evaluate published research and learn to conceptualize, design, and conduct empirical research.

SPM 6707. Applied Research Practices in Sport Management (3). Prerequisite: SPM 6700. This course provides an intensive survey of relevant research and professional practices in the broadly defined field of sport management. The course emphasizes practical issues related to planning, conducting, and interpreting research relevant to the behavioral aspects of sport. The primary purposes of the course are to provide students with the skills to (1) successfully develop active research agendas, (2) identify sources of external funding, (3) coordinate large-scale research projects, (4) evaluate research, and (5) refine writing and analytical skills.

SPM 6728. Advanced Law in Sport and Physical Activity (3). Prerequisite: Instructor permission. This course serves as an in-depth analysis of the aspects of law encountered in the contemporary practice and business of sport. The course allows students to gain expertise in the practice of sport (negligence, intentional torts, and product liability) and the business of sport (contract, business organizations, employment, labor law, antitrust, intellectual property, sales, and taxes). Civil rights, federal and state statutes, sexual harassment and risk management are also addressed. Students select two topics for in-depth analysis.

SPM 6735. Applied Statistics in Sport Management I (3). Pre- or corequisite: EDF 5401. This course is designed to introduce students to various multivariate statistical methods, and the application of multivariate statistics to research problems in sport management.

SPM 6736. Applied Statistics in Sport Management II (3). This course is designed to introduce students to Structural Equation Model (SEM) theory and method, and the application of Structural Equation Modeling to research problems in sport management. Students gain an understanding of common Structural Equation Modeling techniques that are applicable in sport management research.

SPM 6746. Qualitative Inquiry in Sport and Physical Culture (3). This seminar introduces students to theories, methods, and philosophies of qualitative inquiry in sport and physical culture, including cultural studies, ethnography, narrative inquiry, researcher subjectivity, and the politics of evidence. Students develop an in-depth understanding of the art and practice of interpretation as it relates to qualitative approaches to research in sport management and related fields.

SPM 6931. Seminar in Strategic Management in Sport (3). In this seminar, students examine the history and development of general-strategy research and some of its underlying themes, including the role of top managers; the central concern for the success, failure, and relative performance of firms; the need to match internal characteristics of the firm with the external environment; and the dualities of process/content and formulation/implementation.

SPM 6932r. Advanced Topics in Sport Management (3). This course offers an analysis of selected topics in sport management. May be repeated to a maximum of twelve semester hours.

SPM 6967. Qualifying Examination (0). (P/F grade only.) This course is the qualifying examination to be taken after a doctoral student has completed eighteen to twenty-four hours of coursework. The exam is an assessment of a student’s ability to continue in the program.

SPM 6980r. Dissertation (1–12). (S/U grade only). Students enroll for dissertation credit once they have passed the preliminary examination and are admitted to candidacy. May be repeated to a maximum of thirty-six credit hours.

SPM 8968. Preliminary Examination (0). (P/F grade only.) This preliminary examination determines if students have mastered the content area of sport management and are prepared to plan and conduct independent and scholarly research. Upon successful completion of the preliminary examination, students are admitted to candidacy and may begin taking dissertation hours.

SPM 8969r. Comprehensive Examination (0). (P/F grade only.) This course is a comprehensive examination to be taken during the semester in which students plan to graduate and requires students to apply the knowledge acquired through the completion of sport management courses. May be repeated.

SPM 8976. Thesis Defense (0). (P/F grade only.) Students enroll for thesis defense in the semester in which they plan to graduate.

SPM 8985. Dissertation Defense (0). (P/F grade only.) Students enroll for thesis defense in the semester in which they plan to graduate.

SPORTS PSYCHOLOGY: see Educational Psychology and Learning Systems

Graduate Department of STATISTICS

COLLEGE OF ARTS AND SCIENCES

Website: <http://stat.fsu.edu/>

Chair: Xu-Feng Niu; **Associate Chair:** Fred Huffer; **Director, Statistical Consulting Center:** Ramsier; **Director, Graduate Students:** Barbu; **Director, Statistical Computing:** Srivastava; **Director, Biostatistics:** Sinha; **Director, Statistical Data Science:** Slate; **Professors:** Barbu, Chicken, Huffer, Niu, Patrangenu, She, Sinha, Slate, Srivastava, W. Wu; **Associate Professors:** Cao, Mai, H. Zhang, J. Zhang.; **Assistant Professors:** Barrientos, Bradley, Huang, Lin, C. Wu; **Teaching Professor:** Ramsier; **Senior Lecturers:** Bose, Shows; **Professors Emeriti:** Hollander, Lin, McGee, Meeter, Sethuraman, Zahn

The Department of Statistics offers programs leading to the Master of Science (MS) in statistics, the Master of Science in statistics with a major in Statistical Data Science, the Master of Science (MS) in biostatistics, and the Doctor of Philosophy (PhD) degrees in statistics and biostatistics. The MS and PhD programs prepare students for professional careers in academia, industry, and government.

The Department of Statistics also offers a graduate certificate in data analysis and SAS programming. The certificate is earned by completing specific course requirements (See <http://sas.stat.fsu.edu/> for details).

Facilities

The Department of Statistics provides statistical consultation on University research through the **Statistical Consulting Center**. The center works cooperatively with faculty and graduate students throughout FSU in research and plays a role with research teams in the design of experiments and the analysis of data. Graduate students who anticipate theses and dissertations involving statistical analyses should plan their programs to include basic training in statistics in order to take full advantage of the services of the center.

The Department of Statistics provides facilities for computation in connection with coursework and research. The Department has a local area network of workstations and PCs running Linux and Windows operating systems, as well as networked printers. Linked to the campus-wide network, these workstations may be used to access the University-operated clusters for computationally intensive projects.

Faculty members of the Department of Statistics are engaged in basic research supported by grants and contracts with such agencies as the National Science Foundation, the National Institutes of Health, the National Imagery and Mapping Agency, and the United States Army Research Office.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Admission Requirements

Prior work in statistics is not a requirement for admission to graduate study. Applicants must have at least a 3.0 GPA on a 4.0 scale and have completed a three- or four-semester calculus sequence. A course in linear algebra is required and a sequence of real analysis courses is desirable but not required. A score at the 65th percentile or higher in quantitative reasoning and at least the 35th percentile in verbal reasoning on the Graduate Record Examinations (GRE) is required. Individual programs of study are developed in consultation with the departmental faculty through supervisory committees appointed during the first semester of graduate study.

Master of Science Degree

The following options for the Master of Science degree are possible:

1. A three-semester program emphasizing statistical data science, which results in an MS in statistics with major in statistical data science;
2. A four-semester program emphasizing mathematical statistics, which results in an MS in statistics;
3. A four-semester program emphasizing applied statistics, which results in an MS in statistics;
4. A four-semester program emphasizing biostatistics, which results in an MS in biostatistics degree;
5. Undergraduates may enroll in a combined bachelor's/master's pathway. The graduate degree earned is an MS in Statistics, Statistical Data Science, or Biostatistics.

The MS in statistics with major in statistical data science requires thirty-two credit hours. All of the other Master of Science degrees require thirty-six credit

hours, thirty of which must be taken for a letter grade. No examination is required for the MS degree but the student must meet all University academic standards. Full course programs are prepared in consultation with the student's supervisory committee. A detailed description of the Master of Science programs can be obtained on the department's Web site at <http://stat.fsu.edu>.

Doctor of Philosophy Degree

The Department of Statistics offers two doctoral degrees: the PhD in Statistics and the PhD in Biostatistics.

The required courses for the PhD in biostatistics include courses that emphasize the theory, development, and application of biostatistical and computational statistics methods. The PhD in statistics includes courses that emphasize the theory and development of statistical methods.

For both degrees, course programs and exact degree requirements are determined individually for students through consultation with their supervisory committee. Both degrees require the student to achieve a firm foundation in the theory of statistics and include a PhD qualifying examination, usually taken at the beginning of the Spring semester of their second year of attendance. Both degrees also require a prospectus examination, usually conducted during their third academic year in the program. A more complete description of the degree requirements may be found on the Department of Statistics webpage at <http://stat.fsu.edu>.

Definition of Prefix

STA—Statistics

Graduate Courses

STA 5066. Data Management and Analysis with SAS (3). Prerequisite: Previous background in statistics at least through linear regression or instructor permission. This course introduces SAS software in lab-based format. SAS is the world's most widely used statistical package for managing and analyzing data. The objective of this course is for students to develop the skills necessary to address data management and analysis issues using SAS. This course includes a complete introduction to data management for scientific and industrial data and an overview of SAS statistical procedures.

STA 5067. Advanced Data Management and Analysis with SAS (3). Prerequisite: STA 5066. This course presents additional methods for managing and analyzing data with the SAS system. It covers as many of the following topics as time permits: Advanced Data step Topics, Manipulation of Data with Proc SQL, the SAS Macro Facility, Simulation with the data step and Analyses with Proc IML.

STA 5106. Computational Methods in Statistics I (3). Prerequisites: At least one previous course in statistics above STA 1013 and some previous programming experience; or instructor permission. This course utilizes Matlab and a programming language (C/ Fortran). Floating point arithmetic, numerical matrix analysis, multiple regression analysis, nonlinear optimization, root finding, numerical integration, and Monte Carlo sampling.

STA 5107. Computational Methods in Statistics II (3). Prerequisite: STA 5106 or instructor permission. This course utilizes Matlab and a programming language (C/ Fortran). The course is a continuation of STA 5106 in computational techniques for linear and nonlinear statistics. The course also covers statistical image understanding, elements of pattern theory, simulated annealing, Metropolis-Hastings algorithm, and Gibbs sampling.

STA 5126. Introduction to Applied Statistics. (3). Prerequisite: MAC 1105. This course offers graduate credit for non-statistics majors. Topics include data collection, sample variation, basic probability, confidence intervals, hypothesis testing, analysis of variance, contingency tables, correlation, regression, and nonparametric statistics. No credit is given for STA 5126 if a "C-" or better is earned in STA 2023, STA 2122, STA 2171, STA 3014, STA 3032, or QMB 3200.

STA 5166. Statistics in Applications I (3). Prerequisite: MAC 2313. This course introduces topics such as comparison of two treatments, random sampling, randomization and blocking with two comparisons, statistical inference for means, variances, proportions and frequencies, and analysis of variance.

STA 5167. Statistics in Applications II (3). Prerequisite: STA 5166. This course focuses on topics such as special designs in analysis of variance, linear and nonlinear regression, least squares and weighted least squares, case analysis, model building, nonleast squares estimation.

STA 5168. Statistics in Applications III (3). Prerequisite: STA 5167. This course focuses on topics such as response surface methods, repeated measures and split-plot designs, basic log-linear and logit models for two-way and multiway tables, and multinomial response models.

STA 5172. Fundamentals of Biostatistics (3). Prerequisite: A previous course in statistics or instructor permission. This course introduces students to the statistical methods used in studying the prevention of disease in human populations.

STA 5176. Statistical Modeling with Application to Biology (3). Prerequisite: STA 4442 or STA 5440. This course covers maximum likelihood principle, missing data and EM algorithm; assessment tools such as bootstrap and cross-validation; Markov chain and hidden Markov models; classification and regression trees (CART); Bayesian models and Markov Chain Monte Carlo algorithms.

STA 5179. Applied Survival Analysis (3). Prerequisite: STA 2171. This course is an applied introduction to survival analysis, one of the most commonly used analytic tools in biomedical studies. Topics to be covered include censoring and time scale, descriptive methods, parametric methods, and regression methods, which stress the proportional hazards model.

STA 5198. Epidemiology for Statisticians (3). Prerequisites: STA 5167 and STA 5327 or instructor permission. This course covers fundamental methods of epidemiology for statisticians. With a focus on identification of risk factors for disease, topics include exposure-disease association, design of cohort, matched and randomized studies; cross-sectional and longitudinal studies; statistical analysis of data arising from such studies, confounding, adjustment and causality; and evaluation of diagnostic and screening tests.

STA 5206. Analysis of Variance and Design of Experiments (3). Prerequisite: One of STA 2122, STA 4322, or STA 5126. This course expounds on topics such as one and two-way classifications, nesting, blocking, multiple comparisons, incomplete designs, variance components, factorial designs, confounding. Graduate credit for non-statistics majors only.

STA 5207. Applied Regression Methods (3). Prerequisite: One of STA 2122, STA 4322, or STA 5126. This course discusses topics such as general linear hypothesis, analysis of covariance, multiple correlation and regression, response surface methods. Graduate credit for non-statistics majors only.

STA 5208. Linear Statistical Models (3). Prerequisite: STA 5327.

STA 5225. Sample Surveys (3). Prerequisite: A course in statistics above STA 1013 or instructor permission. This course introduces topics such as simple, stratified, systematic, and cluster random sampling, ratio and regression estimation and multistage sampling.

STA 5238. Applied Logistic Regression (3). Prerequisite: STA 3032 or an equivalent upper division course that covers basic statistics at least through linear regression. This course is an applied introduction to logistic regression, one of the most commonly used analytic tools in statistical studies. Topics include fitting the model, interpretation of the model, model building, assessing model fit, model validation, and model uncertainty.

STA 5244. Clinical Trials (3). Prerequisite: STA 2171. This course offers an introduction to clinical trials. Topics to be covered include defining the research question, basic study designs, randomization, blinding, sample size, baseline assessment, data collection and quality control, monitoring, issues in data analysis, closing out a trial, reporting and interpreting results, and issues in multicenter trials.

STA 5323. Introduction to Mathematical Statistics (3). Prerequisite: MAC 2313 or equivalent. This course discusses topics such as distributions of random variables, conditional probability and independence, multivariate distributions, sampling distributions, Bayes' rule, counting problems, expectations.

STA 5325. Mathematical Statistics (3). Prerequisites: STA 4442 or STA 5440 and either MAC 2313 or STA 5326. This course explores topics such as sufficiency, point estimation, confidence intervals, hypothesis testing, regression, linear models, Bayesian models.

STA 5326. Distribution Theory and Inference (3). Prerequisites: MAC 2313; at least one previous course in statistics or probability. This course is an introduction to probability, random variables, distributions, limit laws, conditional distributions, and expectations.

STA 5327. Statistical Inference (3). Prerequisites: STA 5166 and STA 5326. This course introduces students to the basics of statistical inference and its applications. The overarching goal is to introduce statistical techniques to estimate and provide uncertainty measures of the estimates themselves of key quantities of a population e.g. mean, median, location shift, variance, etc. using the observed sample.

STA 5334. Limit Theory of Statistics (3). Prerequisite: STA 5327. This course focuses on topics such as convergence of distribution and random variables, laws of large numbers, central limit theorems, asymptotic distributions, asymptotic efficiency, rates of convergence, the weak invariance principle.

STA 5440. Introductory Probability I (3). Prerequisite: MAC 2311. This course discusses topics such as random variables, probability of random variables, generating functions, central limit theorem, laws of large numbers.

STA 5446. Probability and Measure (3). Prerequisites: MAA 4227, MAA 5307, or the equivalent. This course explores classes of sets, probability measures, construction of probability measures, random variables, expectation and integration, independence and product measures.

STA 5447. Probability Theory (3). Prerequisites: STA 5326 and STA 5446.

STA 5507. Applied Nonparametric Statistics (3). Prerequisite: A course in statistics above STA 1013 or instructor permission. This course focuses on applications of nonparametric tests, estimates, confidence intervals, multiple comparison procedures, multivariate nonparametric methods, and nonparametric methods for censored data.

STA 5635. Applied Machine Learning (3). Prerequisite: STA 3032 or instructor permission. This course is a hands-on introduction to statistical methods for supervised, unsupervised, and semi-supervised learning. It explores fundamental techniques including but not limited to Support Vector Machines, Decision Trees, Linear Discriminant Analysis, Random Forests, Neural Networks, and different flavors of Boosting.

STA 5666. Statistics for Quality and Productivity (3). Prerequisites: STA 5167 or instructor permission, and either STA 4322 or STA 5126. This course discusses statistics for quality control and productivity; graphical methods; control charts; design and experiment for product and process improvement.

STA 5707. Applied Multivariate Analysis (3). Prerequisite: One of STA 5167, STA 5207, or STA 5327. This course discusses inference about mean vectors and covariance matrices, canonical correlation, principal components, discriminant analysis, cluster analysis, and computer techniques.

STA 5721. High-Dimensional Statistics (3). Prerequisites: STA 5167 and STA 5326. Recommended prerequisite: STA 5168. This course covers a range of modern statistical topics in high dimensional modeling and analysis. The course teaches methods, theory and computation with rich high-dimensional data applications from signal processing, machine learning, bioinformatics and econometrics.

STA 5807r. Topics in Stochastic Processes (3). Prerequisite: STA 5326. May be repeated to a maximum of twelve semester hours.

STA 5856. Time Series and Forecasting Methods (3). Prerequisite: STA 5126, QMB 3200, or equivalent. This course explores autoregressive, moving average and mixed models, autocovariance and autocorrelation functions, model identification, forecasting techniques, seasonal model identification estimation and forecasting, intervention and transfer function model identification, estimation and forecasting.

STA 5906r. Directed Individual Study (1-12). (S/U grade only). May be repeated to a maximum of twelve semester hours.

STA 5910r. Supervised Research (0-5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three semester hours may apply to the master's degree.

STA 5920r. Statistics Colloquium (1). (S/U grade only). May be repeated to a maximum of twelve semester hours.

STA 5934r. Selected Topics in Statistics, Probability, or Operations Research (2-3). May be repeated to a maximum of twelve semester hours.

STA 5939. Introduction to Statistical Consulting (3). Prerequisite: STA 5167, or STA 5327, or instructor permission. This course consists of the formulation of statistical problems from client information, the analysis of complex data sets by computer, and practical consulting experience.

STA 5940r. Supervised Consulting (1-3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

STA 5941r. Supervised Teaching (1-5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three semester hours may apply to the master's degree.

STA 5945r. Internship in Statistics (0-6). In this course, students gain practical experience in the application of statistical methods working as an intern at an appropriate company or government agency performing statistical analysis under supervision of a corporate, or government. This course may also be taken by students working on an approved data-based grant project in another department on campus or on an interdisciplinary grant project involving statistics and another department on campus. In this case, the affiliate faculty member will be the student's supervisor on the project.

STA 5971Cr. Thesis (3-6). (S/U grade only). Six semester hours required.

STA 6174r. Advanced Methods in Epidemiology (3). Prerequisites: STA 5167 and STA 5325. This course presents advanced methods for describing, analyzing, and modeling data from observational studies. The initial offering includes introductions to meta-analytic methods, bootstrap methods, and randomization tests. Topics vary with each offering. May be repeated up to a maximum of six semester hours.

STA 6246r. Advanced Probability in Applied Statistics (2-3). Prerequisite: STA 5167. May be repeated to a maximum of twelve semester hours.

STA 6346. Advanced Probability and Inference I (3). Prerequisites: STA 5326 and STA 5327. This course covers the basics of the probability theory, random elements, and stochastic processes; characteristic functions and probability inequalities; central limit theorems; elements of Markov dependence and martingale theory; common scholastic processes arising in biostatistics; advanced treatment of sufficient statistics, exponential families, estimation, and testing; as well as elements of asymptotic theory of statistical inference.

STA 6448. Advanced Probability and Inference II (3). Prerequisites: STA 5326 and STA 5327. This course covers unbiased and locally most powerful tests (including the multiparameter case); envelope power function; best average power test; Bayes and empirical Bayes procedures; likelihood, quasi likelihood, and profile likelihood; order statistics and empirical distributions; general central limit theorems; variance stabilizing transformations; U-statistics; least squares, weighted least squares, and generalized least squares estimation; generalized estimating equations; asymptotic theory for BAN estimators; asymptotic theory for likelihood ratio, Wald, and score tests; log-linear models; asymptotics for linear inference; as well as robust statistical inference.

STA 6468r. Advanced Topics in Probability and Statistics (2-3). May be repeated to a maximum of twelve semester hours.

STA 6557. Object Data Analysis (3). Prerequisite: One of STA 5707, STA 5327, or STA 5746. This course covers the most inclusive type of data analysis known in statistics; examples of such data in astronomy, biology, digital imagery, medical imaging, computer vision, pattern recognition, astrophysics, learning, Earth sciences including meteorology and geology; introduction to abstract manifolds, tangent bundles, embedding, Riemannian structures; sample spaces with a manifold structure; foundations of nonparametric statistics on manifolds: location and spread parameters for distributions on manifolds; large sample theory on manifolds, density, and function estimation on manifolds; nonparametric inference on manifolds; statistical analysis on special manifolds arising in statistics: directional and axial data analysis, projective, affine, and similarity shape data analyses, size-and-shape data analysis, diffusion tensor image analysis; concrete case studies in astronomy, image analysis, medical imaging: MRI, CT, Confocal Laser Tomography, eye imaging, brain imaging, bioinformatics, computer vision, and 3D scene recognition.

STA 6709. Spatial Statistics (3). Prerequisites: STA 5167 and STA 5327; or instructor permission. This course examines methods for the analysis of spatial data, including geostatistical data, lattice data, and point patterns. The course also includes theory and applications of basic principles and techniques.

STA 6906r. Directed Individual Study (1–12). (S/U grade only). May be repeated.

STA 6980r. Dissertation (1–12). (S/U grade only).

STA 8964. Preliminary Doctoral Examination (0). (P/F grade only.)

STA 8976. Master's Thesis Defense (0). (P/F grade only.)

STA 8985. Defense of Dissertation (0). (P/F grade only.)

**SURVEYING AND RELATED AREAS:
see Civil and Environmental Engineering**

**TAX ACCOUNTING:
see Accounting**

**TEACHING ENGLISH AS A SECOND LANGUAGE:
see Teacher Education**

Graduate Interdisciplinary Program in STEM TEACHING

COLLEGE OF ARTS AND SCIENCES

Website: <http://bio.fsu.edu/osta/tpp.php>

Director: Erica Staehling (estaehling@bio.fsu.edu)

Program Overview

The College of Arts and Sciences offers a master's degree for students seeking a science, technology, engineering, and/or mathematics (STEM) career path that involves teaching through the Masters in STEM Teaching (MST) program. A typical candidate plans to become a faculty member or teacher, whether a tenure-track professor or lecturer at a 4-year college or university, an instructor at a 2-year college, or even a K-12 teacher. Through required coursework and teaching internships, the program offers an opportunity to STEM undergraduates to become exceptionally qualified teachers at either the secondary or post-secondary level.

MST is a non-thesis master's program, designed to extend and deepen the science background of its students through graduate coursework in their STEM content areas, as well as provide strong preparation in the pedagogical aspects of STEM teaching and learning, including high-quality, extended teaching internships. The program builds upon a strong partnership between the College of Arts and Sciences and the College of Education to provide the best experiences for students in the content (STEM) and teaching (education) areas, working with local secondary schools and Tallahassee Community College to provide internship experiences for all students.

Typical students fit into one of two categories: (1) those pursuing MST as a stand-alone MS program after completion of a BS degree in a STEM discipline, or (2) those pursuing MST concurrently with a graduate degree in one of FSU's STEM departments with the permission of both programs.

For more information, contact the program director.

Definition of Prefix

ISC—Interdisciplinary Sciences

Graduate Courses

ISC 5098. Reflective Science Teaching (2). Prerequisites: ISC 5525, ISC 5535, ISC 5944, and ISC 5946. Corequisites: ISC 5945 and ISC 8938. This course provides a forum for discussion of contemporary science teaching issues and concerns associated with the corequisite full-time internship.

ISC 5295. College Science Teaching and Learning (3). This course is a study of best practices for college science teaching and learning as grounded in recent recommendations from the National Research Council of the National Academy of Sciences and based on the accumulating findings of discipline-based education research on post-secondary science teaching.

ISC 5525. Accomplished Practices in Science Teaching (2). Prerequisites: EDF 4210, EDF 4430, EDG 4321, RED 4335, and TSL 4324. In this course, students develop the practical skills needed to successfully complete a teaching portfolio using Chalk and Wire, reflect on prerequisite coursework and associated field experiences, and set goals for future internship experiences.

ISC 5535. Research in the Content Area for Teachers (6). Corequisite: ISC 5525. This course immerses pre-service teachers in science research and reflection on the pedagogy of inquiry-based teaching. Students also develop a template for designing inquiry-based teaching in the classroom.

ISC 5944. Ethics, School Law, and Management of Science Classrooms (3). Prerequisites: ISC 5525 and ISC 5535. Corequisite: ISC 5946. This course provides support and guidance to Master in Science Teaching students engaged in their half-time student teaching. The focus is on classroom management and planning, professional ethics, and state and federal school laws.

ISC 5945. Full-Time Teaching Internship (6). (S/U grade only). Prerequisites: ISC 5944 and ISC 5946. This internship is for students in the Master in Science Teaching program. Students complete at least thirteen weeks of student teaching in the classroom.

ISC 5946. Half-Time Teaching Internship (3). (S/U grade only). Prerequisite: ISC 5525. Corequisite: ISC 5944. This course provides a closely supervised half-time internship under the guidance of a mentor teacher and a university supervisor. Students concentrate on observing the management, teaching, and assessment strategies of a supervising teacher, and teach a unit of instruction in the classroom.

ISC 8938. Portfolio Review (0). (S/U grade only). Prerequisite: ISC 5525. Corequisites: ISC 5098 and ISC 5945. This course is required to assess students' individual portfolios based on the Florida Educator Accomplished Practices. These portfolios are the summation of work accomplished during the Master in Science Teaching program and students must receive a satisfactory grade in this course for program completion.

School of TEACHER EDUCATION Graduate Programs

COLLEGE OF EDUCATION

Website: <http://education.fsu.edu>

Director: Sherry A. Southerland; **Professors:** Hanline, Jones, Lewis, Patton Terry, Southerland; **Associate Professors:** Andrews-Larson, K. Clark, Dennis, Guerette, Jakubowski, Li, Myers, Whalon, Whitacre; **Assistant Professors:** Cabell, Fleury, Hiver, Ibourk, Jaber, Root, Papi, Schoen, Steacy, Tekkumru-Kisa; **Teaching Faculty III:** A. Davis, Rios (Panama City); **Teaching Faculty II:** Bell, Daniel, Imperial (Panama City); **Teaching Faculty I:** Crowe (Panama City), Hardin, Leushuis, Tenore; **Professors Emeriti:** Clark, N. Davis, Dawson, Denmark, Fooman, Gallard, Green, G. Jones, Kirby, Lynch-Brown, Mills, Oseroff, Palmer, Piazza, Platt, Rice, Schluck, Scott, Tait, Wheatley, Wolfgang

The School of Teacher Education is committed to high-quality personnel preparation programs, service to the state of Florida, and research in early childhood and elementary education, secondary education, reading/language arts, special education, and related areas. The School strives to provide programs of excellence serving undergraduates, graduates, and advanced graduates by teaching, advising, and providing professional role models. Our goal is to prepare educational leaders who will contribute to the betterment of a pluralistic, global society in the context of the state of Florida's needs for an educated, global-minded citizenry.

The mission is accomplished by:

- implementing personnel preparation programs that are comprehensive and that prepare practitioners to implement state-of-the-art research-based practices
- conducting high-quality research in authentic settings
- translating research to practice through service to the profession at the local, state, and national levels

Program requirements for state-approved Educator Preparation programs are subject to revision based on changes in Section 1004.04, Florida Statutes, Public Accountability and State Approval for Educator Preparation Programs and State Board of Education Rule 6A-5.066, Approval of Educator Preparation Programs.

The School of Teacher Education (STE) offers master's, specialist, and doctoral degree programs in Curriculum and Instruction. Additionally, the School of Teacher Education offers two graduate certificate programs: Autism Spectrum Disorder (ASD) and Teaching English to Speakers of Other Languages (TESOL).

CURRICULUM AND INSTRUCTION DEGREE PROGRAM

The Curriculum and Instruction degree program reflects the interdependent nature of contemporary professional education in which subject content and research questions transcend single areas of concentration and demand interdisciplinary collaboration. Graduates earning a Curriculum and Instruction degree possess a dual benefit – they retain an individual content major on their transcript (e.g., Elementary Education, English Education) and attain a Curriculum and Instruction designation on both their diploma and transcript. Finally, graduates earning a degree in Curriculum and Instruction will possess a rigorous degree structure consistent with the needs of a contemporary College of Education.

Master of Science Degree in Curriculum and Instruction (thirty to thirty-six hours)

Coursework for the master's degree is comprised of core program elements and a major field of study. The core program elements are:

- Curriculum (three hours). This element addresses critical issues of PK-12 curriculum. A broad range of scope, sequence, and integration issues would include: 1) The historical, philosophical, psychological, and social foundations upon which curriculum is constructed; 2) The development and use of national and state standards; and 3) Applications in contemporary design (aims, goals, implementation, and assessment alternatives).
- Teaching and Learning (three hours). This element addresses considerations and decisions addressing the needs of learners, selection of teaching methods, and the social interactions necessary to enhance the quality of the learning environment. Tenets of learning theory applied as best practice (e.g., Universal Design for Learning, Response to Intervention, et al.) would be represented in this core element.

- Instructional Technology (three hours). This element addresses considerations, decisions, and critical issues relevant to enhancing instructional effectiveness and efficiency through the use of Web tools, social media and immersive environments, productivity tools, project-based learning, et al. Consideration is also given to effective online/asynchronous teaching and learning best practices.
- Research and Scholarship (three to six hours). This element broadly addresses the interpretation, use, and conduct of research. Master's candidates will design studies, collect relevant information in a field-based environment, and interpret results that lead to instructional improvement and enhanced student achievement. Candidates specifically interested in continuing studies at the doctoral level will, in addition, complete EDF 5481 (Methods of Educational Research; three hours).
- Major Field of Study (eighteen to twenty-one hours). Permits the degree candidate to obtain depth in an individual specialty area. Students can select to complete their Master of Science degree completely online.

The advisor and/or advisory committee will help select courses to meet both the core program elements and field of study.

Note: Select Curriculum and Instruction majors do allow for students to pursue teacher certification while in the Master of Science degree program. However, not all majors provide for this option. If offered, this option will require additional coursework.

Master of Science Degree in Curriculum and Instruction (online program, thirty hours)

Website: <https://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/online-masters>

The online Master's Degree in Curriculum and Instruction (C&I) is designed for beginning and experienced teachers and other educators who are deeply committed to perfecting their instructional effectiveness and becoming teacher leaders in their local settings. The program assists educators in better understanding and addressing:

- the needs of the diverse students they serve;
- the dynamic policy environment represented by new state and local standards; and
- research-based instructional approaches and supports that are available to teachers in the 21st century.

Educators in the program will use their teaching context as sites to explore the ideas, techniques, technology, and approaches introduced in the program to determine their local effectiveness. Participation in the program will require educators to be committed to honing their knowledge of students, content, and standards. This will be accomplished by having educators reflect on and examine their own knowledge, abilities, and educational effectiveness through the use of data collected from their practice interpreted using the theoretical and methodological tools introduced in the program. The online C&I master's program allows educators to specialize in an area of study by offering a number of majors: Autism Spectrum Disorder, Early Childhood Education, Elementary Education, English Education, Foreign and Second Language Education, Mathematics Education, Science Education, Social Science Education. **Note:** *This program does not lead to teacher certification as it is an advanced program designed for current teachers.*

The target audience for this program is practicing teachers and other educators intent on enhancing their teaching effectiveness and/or becoming teacher leaders as well as teachers in need of continuing education credit. Participation in the program will require that the educator has access to students in some sort of instructional capacity (formal or informal). The seven core courses will ask the teacher learners to apply the techniques, tools, and approaches explored in the courses in their work with students. The culminating event in the capstone course will require that the teacher learners use the theoretical tools introduced in the program to describe and reflect on video recordings and teacher/student work products drawn from their teaching practice. The program can be completed completely online, although in some specializations, face-to-face options may be available. Online core courses are designed to accommodate teachers' varied work schedules.

Coursework for the online master's degree is comprised of seven core courses and four courses that include electives or courses within the major. The core courses include:

- | | |
|-----------------|---|
| EDG 5206 | Teachers and Curriculum Development |
| EDG 5339 | Making Sense of Data to Inform Instruction |
| EDG 5342 | Analyzing and Refining Teaching |
| EDG 5345 | Using Assessments in the PK-12 Classroom to Differentiate Instruction |
| EDG 5709 | Culturally Responsive Teaching |

EEX 5089 Adaptations and Accommodation for Learners with Disabilities

EME 5050 Teaching with Technology

Majors are available in Elementary Education, English Education, Mathematics Education, Social Science Education, Science Education, and Special Education. The academic advisor and/or advisor committee will help students to select courses satisfy the core program elements, major courses, and elective requirements.

Specialist Degree in Curriculum and Instruction (minimum thirty to thirty-eight hours)

Coursework for the specialist degree is comprised of core program elements that accompany a major that reflects an individual area of expertise/interest. The core program elements are:

- Interdepartmental Core (nine hours) in the areas of Curriculum Theory (three hours), Learning Theory (three hours), and Policy Studies (three hours). This element represents an opportunity to gain insights from department faculty external to the School of Teacher Education. Completion of this core simultaneously provides curriculum and instruction specialist candidates with a more comprehensive view of professional education theory and best practices.
- Seminars (minimum two hours). This element includes a minimum of two curriculum and instruction seminars. Topics might include: action research, grant writing, online teaching/learning, program evaluation, etc.
- Research Methods Core (minimum twelve hours). A minimum of twelve semester hours of graduate courses must be completed in the research methods core. The student must demonstrate knowledge and competence with basic descriptive and inferential statistics and various qualitative methods of educational research.
- Major Field of Study (minimum fifteen hours). Permits the degree candidate to obtain depth in an individual specialty area.

The advisor and/or advisory committee will help select courses to meet both the core program elements and field of study.

Doctoral Degree in Curriculum and Instruction (minimum sixty-five hours)

Coursework for the doctoral degree is comprised of core program elements that accompany a major that reflects an individual area of expertise/interest. The core program elements are:

- Interdepartmental Core (nine hours) in the areas of Curriculum Theory (three hours), Learning Theory (three hours), and Policy Studies (three hours). This element represents an opportunity to gain insights from department faculty external to the School of Teacher Education. Completion of this core simultaneously provides curriculum and instruction doctoral candidates with a more comprehensive view of professional education theory and best practices.
- Seminars (minimum two hours). This element includes a minimum of two curriculum and instruction seminars. Topics might include: academic and professional identity, critiquing educational research, grant writing, etc.
- Research Methods Core (minimum twelve hours). A minimum of twelve semester hours of graduate courses must be completed in the research methods core. The student must demonstrate knowledge and competence with basic descriptive and inferential statistics and various methods of educational research.
- Dissertation Research (minimum twenty-four hours). The minimum number of dissertation hours for completion of a doctoral degree is twenty-four semester hours.
- Major Field of Study (minimum fifteen hours). Permits the degree candidate to obtain depth in an individual specialty area.

The advisor and/or advisory committee will help select courses to meet both the core program elements and field of study.

Program, Majors, Degrees

The following program, majors, and degree levels are offered by the School of Teacher Education:

Program:

Curriculum and Instruction (C&I)

Majors:

Autism Spectrum Disorder (M) (online/distance learning)

Early Childhood Education M, S, D

Elementary Education BS/MS Combined Pathway, M, S, D

English Education BS/MS Combined Pathway, M, S, D

Foreign and Second Language Education M, S, D

Mathematics Education M, S, D

Reading Education/Language Arts M, S, D

Science Education M, S, D

Social Science Education BS/MS Combined Pathway, M, S, D

Special Education BS/MS Combined Pathway, M, S, D

Autism Spectrum Disorder M (online/distance learning)

Visual Disabilities BS/MS Combined Pathway, M, S

Visual Disabilities Studies M (online/distance learning)

Graduate Certificates:

Autism Spectrum Disorder

Teaching English to Speakers of Other Languages

Admission Standards

Students considered for admission to graduate programs in Curriculum and Instruction (C&I) must present a 3.0 grade point average (GPA) for upper-division undergraduate coursework and a minimum GRE score determined by the department. All applicants to C&I programs must submit an official GRE score as part of the admission process. Individual majors may have additional requirements for admission. Students should consult the School of Teacher Education for details regarding specific majors. The School of Teacher Education is committed to increasing the proportion of teacher candidates who have historically been underrepresented among Florida's public school teachers, and applicants representing such groups will be considered for exceptions to the general and major admissions criteria.

Per policy adopted by the Florida State University Professional Education Advisory Council, students seeking readmission to a teacher education program shall be responsible for meeting the most current course, clinical, and certification requirements set out by that program; readmitted students in these programs will not be 'grandfathered' under the educator preparation requirements in effect at the time of original admission to the major.

Common prerequisites and admission criteria for state-approved teacher preparation programs are subject to revision based on changes in Section 1004.04, Florida Statutes, State Public Accountability and State Approval for Teacher Preparation Programs, Board of Education Rule 6A-4.0021, Florida Teacher Certification Examinations, and State Board of Education Rule 6A-5.066, Approval of Educator Preparation Programs.

AUTISM SPECTRUM DISORDER

The Master of Science in Curriculum and Instruction with a major in Autism Spectrum Disorder is designed for practicing teachers who wish to expand and/or update their knowledge of special education and/or to increase their ability to teach learners who experience disabilities. It is appropriate for individuals with degrees or teacher certification in special education, early childhood, elementary education, or middle or high school education. This program is not designed to meet teacher certification requirements for any state. The program is a minimum of thirty semester hours and provides for specialization in early childhood special education, severe disabilities, and high incidence disabilities. All coursework is completed online.

MASTER'S DEGREE IN CURRICULUM AND INSTRUCTION WITH A MAJOR IN AUTISM SPECTRUM DISORDER (PART-TIME/ONLINE)

For more information on the online MS program in Curriculum and Instruction with a major in Autism Spectrum Disorder, please see the Master of Science Degree in Curriculum and Instruction (Online Program, Thirty Hours) section of this *Graduate Bulletin*.

Graduate Certificate in Autism Spectrum Disorder

Autism spectrum disorder (ASD) is one of the fastest growing disability categories. The rising prevalence of ASD has also increased the need for professionals with expertise and knowledge of effective practices to best serve individuals with ASD. The graduate certificate in ASD is a 16 credit hour non-licensure program designed for (1) practicing professionals serving individuals with ASD in schools, communities, and agencies (e.g., teachers, behavior therapists, speech language pathologists, psychologists, counselors, medical professionals, vocational rehabilitation specialists, physical therapists, occupational therapists, childcare providers, administrators, family members), or

(2) individuals pursuing a graduate degree with an interest in providing direct service to individuals with ASD. Therefore, current graduate students enrolled in a degree program at FSU and post-bachelor's non-degree seeking students are eligible to apply for the Certificate in ASD.

EARLY CHILDHOOD EDUCATION

Website: <http://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/early-childhood-education-m-s-d>

The Early Childhood Education major offers graduate coursework leading to master's, specialist, and doctoral degrees in Curriculum and Instruction. The primary goal of the Early Childhood program is to prepare professionals to work in various early childhood settings including prekindergarten programs, early childhood centers, and Pre-K to grade three in public and private schools.

Master's Degree

The Master of Science (MS) curricula in Early Childhood Education is designed for individuals aspiring to be master classroom teachers of children, birth to age eight (or grade three) in public and private schools, early childhood centers, or similar educational institutions. This program is also for those who have an interest in becoming center directors, curriculum leaders of schools and districts, or educational consultants. The master's degree is also attractive to prospective doctoral candidates in education who are seeking an interdisciplinary program of studies for a master's degree.

Curricula

Three types of programs are offered:

1. For students who are already certified teachers, thirty-three semester hours and a comprehensive exam or thesis are required. Coursework includes a core minimum of nine semester hours focusing on the early childhood curriculum, early childhood research, and instructional technology; twenty-one to twenty-two semester hours in early childhood education content; and three semester hours in teaching and learning. Students may write a thesis that will substitute for up to six semester hours of coursework;
2. For students who do not have early childhood certification, a program similar to 1 (above) but with a core of classes focusing on teaching methods. A comprehensive examination is also required for this track. Coursework includes a core minimum of nine semester hours focusing on the early childhood curriculum, early childhood research, and instructional technology; twenty-four to twenty-seven semester hours in early childhood methods courses; and three semester hours in teaching and learning. Students in this track also have the option of taking three hours of supervised teaching. Although this track is not an initial certification program, graduates are eligible to apply for the Florida Department of Education's Temporary Certificate so that they can begin teaching full time.
3. The third track is for those interested in early childhood special education. Designed for those already certified to teach, this program includes classes in early childhood special education as well as early childhood education. Students have the option of including courses for the Pre-Kindergarten Disabilities Endorsement (twelve credits) or the Infant/Toddler Developmental Specialist Certificate (nine credits). Coursework includes a core minimum of nine semester hours focusing on the early childhood curriculum, early childhood research, and instructional technology; nine to twelve hours in early childhood special education; and twelve to fifteen semester hours in early childhood education content.

Master's Degree in Curriculum and Instruction with a Major in Early Childhood Education (Part-time/Online)

For information on the online MS program in Curriculum and Instruction with a major in Early Childhood Education, please see the Master of Science Degree in Curriculum and Instruction (Online Program, Thirty Hours) section of this *Graduate Bulletin*.

Specialist Degree

The Specialist in Education and Doctor of Philosophy degree programs are designed to prepare individuals for leadership roles in early childhood education (i.e. infancy, preschool, kindergarten, and primary education). Some examples of the broad range of professional roles available to those pursuing these advanced degrees include serving as college or university faculty, staff specialists in public or private school systems, and in governmental or professional organizations.

Curricula

For the specialist degree, each student's committee, based on the curricular needs and career focus of the student, individually designs a thirty-six-semester hour program of studies. Areas of concentration typically include developmental learning, integrated curriculum, or early childhood content and pedagogy. Students are encouraged to write a thesis in lieu of a comprehensive exam, which may substitute for up to six hours of coursework.

Doctoral Degree

The doctoral program is individually planned in conjunction with the major professor and the student's supervisory committee with coursework emphasis in the following areas: research, theory base for childhood education, evaluation, curriculum, instruction, special field experience, practicum, and directed research. Doctoral studies in Early Childhood Education prepare individuals for leadership positions in colleges and universities, local school districts, in-service teacher education for school districts, state departments of education, state and federal government, and educational research and development centers. Since completing a doctoral major in Early Childhood Education requires an intensive commitment, students are encouraged to pursue doctoral study on a full-time basis. Qualified applicants are eligible for financial support, teaching assistantships, tuition waivers, student housing, and consulting opportunities for teacher education centers. A limited number of fellowships and scholarships from the college and University are also available on a competitive basis.

Curricula

The program of study leading to a Doctor of Philosophy in Curriculum and Instruction with a major in Early Childhood Education requires a minimum of forty-eight semester hours of coursework, twenty-four semester hours of dissertation credit, and satisfactory completion of a qualifying exam, preliminary exam, prospectus defense, and oral defense of the dissertation. The coursework includes a nine semester-hour core of interdepartmental courses, two one-hour Curriculum and Instruction seminars, fifteen semester hours in research design and qualitative and quantitative research methods, and fifteen semester hours of early childhood education content. Students study key research in their selected field of study, practice appropriate inquiry methods, and demonstrate the capacity to carry out independent scholarly investigation.

Definition of Prefixes

EEC—Education: Early Childhood

LIS—Library and Information Studies

Graduate Courses

EEC 5263. Thematic Curriculum and Direct Instruction for Young Children (3). This is one of three courses designed to provide theory/research bases for the development of curriculum and practices for educating children ages 3 years to grade 3. The course focuses on thematic curriculum and direct instruction.

EEC 5269. Curriculum and Play for Young Children (3). This is one of a three-course series designed to provide theory/research bases for the development of appropriate curriculum and practices for educating children ages 3 years to grade 3. The course focuses on active learning through play.

EEC 5305. Methods and Experiences with Young Children and Families (3). This course provides direct experiences in working with young children and families and requires seminar attendance and field placement with young children.

EEC 5405. Teachers and Parents: Partners in Education (3). This course focuses on the effects of parental involvement on children's educational development and achievements; designing/implementing strategies for enhancing parent-teacher partnership in education.

EEC 5605. Techniques of Classroom Management and Child Study (3). This course identifies and analyzes theories, programs, and essential components in classroom management. Explores techniques for classroom teachers to use in developing a child study with emphasis on educational implications.

EEC 5615. Issues and Trends in Early Childhood Education (3). This course identifies issues and trends in the area of early childhood education and addresses possible causes and relationships.

EEC 5665. Historical and Theoretical Bases of Early Childhood Education (3). This course compares, analyzes, and synthesizes the different philosophical and psychological theories that form the foundation of early childhood education programs and practices. It also studies the historical events that influenced the direction and nature of the care and education of young children.

EEC 5671. Research in Early Childhood Education (3). This course comprehensively investigates the field through surveying, delineating, searching, and synthesizing research in early childhood education.

EEC 5906r. Directed Individual Study (1-3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

EEC 5911r. Supervised Research (1–5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

EEC 5935r. Special Topics in Early Childhood Education (1–3). This course provides an in-depth examination of topics related to early childhood. May be repeated to a maximum of nine semester hours.

EEC 5942r. Supervised Teaching (1–5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

EEC 5944. Student Teaching in Early Childhood Education (6–10). (S/U grade only).

EEC 5947. Field Laboratory Internship (1–8). (S/U grade only).

EEC 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

EEC 6672. Theory and Research in Young Children's Play Curriculum (3). Prerequisite: EEC 5269 or instructor permission. Seminar on the advanced study of young children's play and curriculum.

EEC 6932. Doctoral Seminar in Early Childhood Education (2). (S/U grade only).

EEC 6980r. Dissertation (1–12). (S/U grade only).

EEC 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

EEC 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

EEC 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

EEC 8976r. Master's Thesis Defense (0). (P/F grade only.)

EEC 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

EEC 8985r. Dissertation Defense (0). (P/F grade only.)

LIS 5566. Diverse Resources for Children and Young Adults (3). This course focuses on evaluating both United States and international literature and information resources for children and young adults from the perspective of diversity. Students explore various diversity issues, including race, ethnicity, sexuality, gender identity, ability, religion, and the immigrant experience. Students employ strategies for using literature and information resources to meet the developmental, informational, and recreational needs of children and young adults in relation to these issues. Discussion includes various resource formats, selection criteria, and promotional strategies.

LIS 5567. International Literature for Children and Young Adults (3). This course provides students an opportunity to explore literature for children and young adults originating in a nation other than the United States. The course draws examples from literary awards for each continent, discusses unique issues of evaluation and provides a comparative view of themes across cultures to increase global understanding, and describes strategies for promoting and using international literature for youth with children, young adults, and adults.

ELEMENTARY EDUCATION

Website: <https://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/elementary-education-m-s-d>

The primary goal of the Elementary Education program is to prepare professionals who work at various levels of instruction, including the primary, intermediate, and middle school grades; in-service teacher education; curriculum development; and college and university teacher education. Coursework and field experiences prepare graduates with specializations appropriate for educating children, grades K through early middle school. Elementary education graduate work includes curricula leading to the master's, specialist, and doctoral degrees.

Program faculty bring an interdisciplinary focus to inquiry in elementary education and have expertise in curriculum theory, developmental learning, integrated learning, teacher cognition, school improvement, teacher education, classroom organization, multicultural learning, and technology education. Subject area content and pedagogy are also integral to the program with specializations in language arts, mathematics, reading, science, and social studies teaching and learning.

Master's Degree

The Master of Science (MS) curricula in Elementary Education are designed for individuals aspiring to be master classroom teachers for elementary and middle school grades, curriculum leaders of schools and districts, or educational consultants. The master's degree is also attractive to prospective doctoral candidates in education who are seeking an interdisciplinary program of studies for a master's degree.

Elementary Education Combined Bachelor and Master of Science (BS/MS) Pathway

This is a three-year Combined Bachelor's/Master's Pathway that starts with the undergraduate junior year and culminates at the end of the third year with the conferral of a bachelor's and a master's degree, with initial Florida DOE certification in K-6 Elementary Education with ESOL and Reading endorsements at the master's degree level.

Curricula

For students seeking initial teacher certification in elementary education (grades K-6), please see the Elementary Education Combined BS/MS Pathway listing in the *Undergraduate Bulletin*.

Master's Degree in Curriculum and Instruction with a Major in Elementary Education (Part-time/Online)

For information on the online MS program in Curriculum and Instruction with a major in Elementary Education, please see the Master of Science Degree in Curriculum and Instruction (Online Program, Thirty Hours) section of this Graduate Bulletin.

Specialist Degree

The Specialist in Curriculum and Instruction with a major in Elementary Education is an advanced degree to prepare individuals for leadership in elementary education programs as master teachers, curriculum specialists, in-service teacher educators, and consultants for public or private educational organizations as well as state and federal government. Typically, this degree is sought as a terminal degree in the field.

Curricula

For the specialist degree, each student's committee designs a thirty-two semester hour program of studies beyond the master's degree, based on the curricular needs and career focus of the individual student. Areas of concentration typically include developmental learning, integrated curriculum, subject area content and pedagogy, elementary and middle school improvement, or technology education. Students are encouraged to write a thesis in lieu of a comprehensive exam, which may substitute for up to six hours of coursework.

Doctoral Degree

The Doctor of Philosophy (PhD) degree in Curriculum and Instruction with a major in Elementary Education emphasizes theory and research in Elementary Education drawn from the disciplines of anthropology, sociology, philosophy, psychology, and the humanities. Doctoral studies in Elementary Education prepare individuals for leadership positions in colleges and universities, local school districts, in-service teacher education for school districts, state departments of education, state and federal government, and educational research and development centers. Since completing a doctoral major in Elementary Education requires an intensive commitment, students are encouraged to pursue doctoral study on a full-time basis. Qualified applicants are eligible for financial support, teaching assistantships, tuition waivers, student housing, and consulting opportunities for teacher education centers. A limited number of fellowships and scholarships from the college and University are also available on a competitive basis.

Curricula

The program of study leading to a Doctor of Philosophy in Curriculum and Instruction with a major in Elementary Education requires a minimum of forty-eight semester hours of coursework, twenty-four semester hours of dissertation credit, and satisfactory completion of a qualifying exam, preliminary exam, and oral defense of the dissertation. The coursework includes a nine semester-hour core of doctoral courses in elementary education; a fourteen to eighteen semester hour core in research design and qualitative and quantitative methods; and other coursework specializations to meet the student's professional and academic goals. Such areas may include specific subject areas in teacher education, evaluation, policy, sociology, economics, or institutional research.

Definition of Prefixes

EDE—Education: Elementary

EME—Education: Technology and Media

MAE—Mathematics Education

SCE—Science Education

SSE—Social Studies Education

Graduate Courses

EDE 5225. The Elementary School, K-6 (3). This course examines foundations for establishing an elementary school program, including the nature of knowledge, social issues, child development, and content development.

EDE 5227. The Integrated Curriculum in the Elementary and Middle School (3). This course analyzes the reasons for integrating the curriculum and teaches how to implement an integrated approach in the elementary and middle schools.

EDE 5266r. Current Issues and Trends in Elementary Education (3). This course is designed for students to perform a critical analysis of a number of issues and trends important to the public elementary school. May be repeated to a maximum of nine semester hours.

EDE 5324. Promoting Thinking in the Elementary School (3). This course is an analysis of thinking processes of elementary-aged children and interventions to enhance thinking. Special emphasis given to critical thinking, creative thinking, moral thinking, problem solving, and decision making.

EDE 5327. Differentiating Instruction (3). This course is for students seeking alternatives to regular certification. The course provides the essential elements needed to differentiate instruction for diverse learners. Topics include flexible grouping, instructional and curricular accommodations, using assessment to inform instruction and implementing tiers of intervention.

EDE 5346. Technology in Elementary and Middle School (3). Prerequisite: Graduate standing or instructor permission. This course is designed to help professional teachers use technology for the development of higher-order thinking. Emphasis is given to current trends and issues in technology, such as Hypermedia and Internet. Teachers develop plans for their own classes that are consistent with recommendations for school improvement.

EDE 5511. Organization for Classroom Instruction in the Elementary School (3). This course is an analysis and critique of current organizational patterns related to teaching in the elementary school.

EDE 5906r. Directed Individual Study (1-3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

EDE 5910r. Supervised Research (1-5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

EDE 5931r. Special Topics in Elementary and Middle School Education (3). This course provides in-depth examination of topics related to elementary and middle school education. May be repeated to a maximum of nine semester hours. May be repeated in the same semester.

EDE 5940r. Supervised Teaching (1-5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

EDE 5941. Internship in Elementary Teaching (9-12). (S/U grade only). Prerequisite: SCE 5215. This culminating internship provides teacher candidates the opportunity to demonstrate mastery of the state-approved teacher preparation standards in a classroom setting, focusing on the areas of planning, instructional delivery, assessment, professional growth, and ethical behavior.

EDE 5942r. Elementary Teaching Field Practicum (3). Prerequisite: EDE 5225. This course provides teacher candidates with the opportunity to participate in an elementary classroom, focusing specifically on curriculum design and instruction, classroom management and discipline, and assessment. May be repeated to a maximum of six (6) credit hours.

EDE 5971r. Thesis (1-6). (S/U grade only). A minimum of six semester hours is required.

EDE 5973r. Specialist in Education Thesis (1-6). (S/U grade only).

EDE 6805. Perspectives of Teacher Professional Development (3). This course is for advanced graduate students preparing for leadership positions associated with professional development of teachers at pre-service, induction, and in-service levels. Model programs are viewed from historical, sociological, psychological, philosophical, and anthropological perspectives.

EDE 6935r. Doctoral Seminar in Elementary Education (3). (S/U grade only). This seminar was developed to explore a variety of topics related to childhood education, curriculum, teacher education, and other areas relevant to professional preparation and thought. May be repeated to a maximum of nine semester hours.

EDE 6937. Advanced Research Seminar in Elementary Education (3). (S/U grade only). Prerequisites: EDF 5400; EDF 5402; and EDF 5481 or equivalent. This seminar is to assist students to master tasks required for a prospectus of a dissertation.

EDE 6980r. Dissertation (1-12). (S/U grade only).

EDE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

EDE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

EDE 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

EDE 8976r. Master's Thesis Defense (0). (P/F grade only.)

EDE 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

EDE 8985r. Dissertation Defense (0). (P/F grade only.)

EME 5050. Teaching and Technology (3). This course is designed to address current technology research and learning theory, instructional design and product development, information access and delivery issues, and pragmatic ideas for integrating educational technology in the classroom. Emphasis is on applying technology applications as an effective tool in teaching and learning.

MAE 5318. The Topics and Teaching of Elementary School Mathematics (3). Prerequisite: Admission to a graduate degree program in Elementary Education or special permission. This course provides in-depth examination of topics related to mathematics learning, mathematics teaching strategies, and mathematics curriculum development in elementary school mathematics.

SCE 5215. Conceptual Learning in Elementary School Science (3). This course provides opportunities to acquire knowledge and skills related to planning and implementing a science program for elementary school children.

SSE 5615. Problems in Teaching Elementary School Social Studies (3). This course identifies problems, their investigation, and application of findings to instruction.

ENGLISH EDUCATION

Website: <https://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/english-education-m-s-d>

English Education Combined Bachelor and Master of Science (BS/MS) Pathway

The three-year Combined Bachelor's/Master's Pathway in English Education starts in the junior year and results with the conferral of a Bachelor of Science in English Education and a Master of Science in English Teaching, with initial Florida DOE certification in 6-12 English Teaching with an ESOL endorsement at the master's degree level. See the *Undergraduate Bulletin* for more details.

This Combined Bachelor's/Master's Pathway requires coursework in English, English education, teaching English as a second language, reading, and professional education. After meeting state of Florida common program prerequisites and passing the Florida Teacher Certification Exam General Knowledge test (required for program admission), students in English education must complete a minimum of fifteen semester hours of English coursework. All upper-division English coursework must be taken at the 3000/4000 level. Courses must include those that focus specifically on these areas: minority American literature, American literature, multicultural literature, Shakespeare, British literature, linguistics, and advanced composition. Students should see an advisor in English education for specific courses satisfying these requirements.

For a complete list of English Education Combined Bachelor's/Master's Pathway coursework, please go to: http://undergrad1.its.fsu.edu/academic_guide/guide-display.php?program=english-education.

All candidates also are required to take TSL 4250, TSL 4251, TSL 5005, and TSL 5142. When taken in conjunction with the courses listed at the above URL, students become eligible for the state ESOL endorsement in teaching English as a second language.

Six semester hours of upper division professional education courses are required (as explained in the "College of Education" section of this *General Bulletin*). Students must complete all required coursework before being admitted to student teaching. Students are encouraged to student teach in the local area (Area I) or in the other areas supported by the College of Education.

In addition to meeting the College of Education criteria for admission to Educator Preparation, students must meet the following standards in order to student teach: 1) have a "C+" or above in all courses required for the major; 2) maintain an overall 'all college' GPA of 2.5 or higher; 3) Passing score on all required subtests of the Florida Teacher Certification Exam (The FTCE General Knowledge Test, The FTCE Professional Education Test, and the FTCE Subject Area Exam in English 6-12). For more information on these exams, go to the Florida Department of Education; and 4) approval by the English education faculty.

Students must meet all of these criteria in order to be eligible to student teach.

Master's Degree in Curriculum and Instruction with a Major in English Education (Part-time/Online)

For information on the online MS program in Curriculum and Instruction with a major in English Education, please see the Master of Science Degree in Curriculum and Instruction (Online Program, Thirty Hours) section of this *Graduate Bulletin*.

Specialist Program

The specialist degree in English Education is available to experienced teachers already holding a master's degree. Thirty semester hours beyond the master's degree are required, including work in professional education, English, educational research, and correlated fields. Program details will be decided upon by candidates in consultation with their supervisory committee. All candidates must pass a comprehensive examination at the completion of coursework.

Doctoral Degree

The English Education major at the doctoral level is designed to prepare candidates for positions in teacher education, supervision, and research. Applicants usually will hold a master's degree in English, English Education,

or in a closely related discipline such as theatre, classics, or humanities. Applicants will be certified teachers with a minimum of three years of successful secondary school teaching experience.

Each doctoral candidate's work will be supervised by a committee of at least four members representing English Education and other appropriate faculties. Additional members from other faculties may participate as the nature of the student's research demands. Students must identify the members of their advisory committee and complete a program of studies form no later than the second semester of coursework.

Students must pass a written qualifying examination during the second semester of coursework. A written and oral comprehensive examination (also referred to as the "preliminary examination") must be passed after completing coursework and before presenting a prospectus of a dissertation. A dissertation must be written and defended in an oral examination.

Sixty-four semester hours of coursework following admission to the program are required (including hours presented for the master's degree), depending upon faculty evaluation of graduate work already completed. Students must also complete a minimum of twenty-four dissertation hours after passing the preliminary examination.

Research Tool

At least twelve semester hours of coursework in methods of research and inquiry will be included in the doctoral student's program. All students will take EDF 5400, Basic Descriptive and Inferential Statistics (4). Students may then pursue a **quantitative** option, which would include EDF 5481, Methods of Educational Research (3), and at least one additional statistics course; or a **qualitative** option, which would be one course approved by their major professor. The qualitative option is recommended as more appropriate for research in teaching and learning language. Students who wish to use questionnaire or survey instruments in their dissertation research must complete a course specifically designed with those goals as a focus. This course must be approved by the student's major professor.

A minimum of thirty semester hours of English courses should be completed at the graduate level, including courses taken in a master's program. It is recommended that the student's selection of English courses should include work in the following areas: literary criticism or critical theory, bibliography and research, and modern rhetoric or composition theory.

With the approval of an advisor, a student may elect to enroll for directed individual study, supervised research, supervised teaching, or for any special topics courses that may be offered.

Definition of Prefixes

LAE—Language Arts and English Education

Graduate Courses

LAE 5064. Reader Response to Literature: Research and Practice (3). This course focuses on concepts of nature of literature, relevant developments in literary studies, theory and criticism, strategies of promoting student response to literary works.

LAE 5297r. Teachers as Writers (3–6). This course is designed for practicing preK-16 teachers who are interested in improving their own writing abilities so as to be better able to do the same for the students with whom they work. May be repeated to a maximum of six semester hours.

LAE 5336. Applied Linguistics for Teachers of English (3). This course is designed to enhance student knowledge of how we perceive and use language. Topics covered include: the history of English as a language, the ways we produce spoken language (physically, instinctually, and intellectually), the ways that language is represented in popular culture, and the arguments and justifications given regarding popular and traditional approaches to teaching language and grammar.

LAE 5347r. Teaching Writing, PK-16 (3–6). This course is designed for practicing preK-16 teachers who are interested in improving their effectiveness as teachers of writing. May be repeated to a maximum of six semester hours.

LAE 5348. Teaching Multiliteracies (3). This course addresses the field of new literacy studies and identifies how emerging understandings of literacy can support the development of literacy practices in academic settings. Students examine the attributes of multiliterate learners and focus on how to develop those attributes through a variety of academic and popular culture texts.

LAE 5364. A Survey of British Literature for English Teachers (3). This course provides those seeking a graduate English-education degree with the opportunity to develop an understanding of the scope of British literature. Participants explore historical, political, and social events that influenced the creation of literature from the Anglo-Saxon era to the present post-modern period.

LAE 5368r. Classroom Management and Methods of Planning and Instruction in Secondary English (3–6). This course offers a careful consideration of the role of the secondary-school teacher of English, paying special attention to effective classroom management, planning for instruction, and assessment of student learning. May be repeated to a maximum of six semester hours.

LAE 5385. A Survey of American Literature for English Teachers (3). This course is designed for secondary English teachers in need of developing content knowledge. The primary focus is on reading a variety of literary works suitable for teaching grades six through twelve.

LAE 5637r. Problems and Trends in English Education (3–6). This course examines the history of English as a school subject; current developments, issues, and research in the teaching of English.

LAE 5645. Pedagogy and Popular Culture (3). This course is designed to address current trends and texts in digital popular culture, and how popular culture affects students, teachers, 21st century literacies, and lesson planning.

LAE 5696. Participatory Culture in Literacy and Learning (3). This course explores the characteristics of participatory culture and the ways people can utilize these characteristics in education to enhance literacy and learning. Additionally, the course examines the cultural and social practices of collaboration, appropriation, and recirculation utilized in new media environments.

LAE 5736. Written Composition in the Secondary School: Theory and Research (3). This course focuses on rhetorical and psychological approaches to the writing process; prewriting, invention, and revision; problems of the basic writer; evaluation of writing and writing skills; current research.

LAE 5748r. Teacher Action Research: Studies in Teaching Writing I (3–6). This course is designed for practicing preK-16 teachers who are interested in designing and implementing a research study of their own classroom instruction so as to improve the writing of their students. May be repeated to a maximum of six semester hours.

LAE 5749r. Teacher Action Research: Studies in Teaching Writing II (3–6). This course is designed for practicing preK-16 teachers who are interested in analyzing their instruction so as to improve their students' writing abilities. May be repeated to a maximum of six semester hours.

LAE 5865. Teaching Media Literacy (3). This course is designed to address the field of media literacy and equip practicing teachers with the knowledge and pedagogies needed to promote media literacy. Students are provided with tools to cultivate their own literacy as well as to teach for media literacy, which supports other literacies, learning, and digital citizenship.

LAE 5908r. Directed Individual Study (1–3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

LAE 5915r. Supervised Research (1–4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

LAE 5932r. Special Topics in English Education (1–3). This course is an investigation of topics of current concern to English teachers, supervisors, and teacher trainers. May be repeated to a maximum of twelve semester hours.

LAE 5940r. Field Laboratory Internship (1–8). (S/U grade only). May be repeated to a maximum of eight semester hours.

LAE 5941. Practicum in Secondary English (3). Prerequisites: LAE 3331 and LAE 3333. This course consists of class meetings as well as a 60-hour field experience for each teacher candidate. The course convenes formally twice per week for the first five weeks, and once per week thereafter. The remainder of the course is devoted to field work in multiple assigned local secondary schools. Work associated with the course continues throughout the entire semester and informs discussion and work in LAE 5368.

LAE 5945r. Supervised Teaching (1–4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

LAE 5971r. Thesis (1–6). (S/U grade only). Minimum six semester hours required.

LAE 5973r. Specialist in Education Thesis (1–6). (S/U grade only). Minimum six semester hours required.

LAE 6980r. Dissertation (1–12). (S/U grade only).

LAE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

LAE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

LAE 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

LAE 8976r. Master's Thesis Defense (0). (P/F grade only.)

LAE 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

LAE 8985r. Dissertation Defense (0). (P/F grade only.)

FOREIGN AND SECOND LANGUAGE EDUCATION

Website: <http://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/foreign-and-second-language-education-m-s-d>

Curricula in Foreign and Second Language Education lead to the Master of Science (MS), the Specialist in Education (EdS), and the Doctor of Philosophy (PhD) in Curriculum and Instruction with a major in foreign and second language education. International applicants must provide evidence of a passing TOEFL score: 80 on the Internet-based test and 550 on the paper-based version; MELAB minimum score: 77. Native English-speaking (US domestic) applicants shall hold an earned baccalaureate degree.

In the Foreign and Second Language Education program, students will have the opportunity to participate in research and investigate issues such as

those related to language pedagogy and curricula, second language acquisition, the development of research-based foreign and second language programs, individual differences in language development, and other issues in instructed language learning and teaching.

Master's Degree

The thirty-three graduate credit-hour master's program in Curriculum and Instruction with a major in Foreign and Second Language Education is sequenced over one calendar year. Within the major there are two tracks: one in Foreign and Second Language Education (FSLE) and one in Foreign and Second Language Educational Research. Both tracks share a common core of courses. The course of study consists of three general areas: Area I, core education requirements; Area II, pedagogy courses specific to the subject area; and, Area III, content-specific courses appropriate for each of the two tracks. To complete a master's degree, students may elect to write and defend a thesis or take comprehensive exams in their final semester.

Master's Degree in Curriculum and Instruction with a Major in Foreign and Second Language Education (Part-time/Online)

The Master of Science Degree delivered online is designed for practicing teachers with an interest in further professional qualifications. For information on the online MS program in Curriculum and Instruction with a major in Foreign and Second Language Education, please see the Master of Science Degree in Curriculum and Instruction (Online Program, Thirty Hours) section of this *Graduate Bulletin*.

Specialist Program

The specialist in education is an advanced master's degree. Applicants to the EdS program must already hold a master's degree in an area of Foreign and Second Language Education or related field. The purpose of this program is to expand the applicant's skills and knowledge in his/her current area of preparation or to extend skills and knowledge to another area of Foreign and Second Language Education. Program details will be decided upon by candidates in consultation with their supervisory committee comprised of a major professor and at least two other members. All candidates must pass a comprehensive examination at the completion of coursework. As part of this program, the student may elect to write a thesis, complete supervised research, pass comprehensive exams, or defend a portfolio or final project.

Doctoral Program

The doctoral program (PhD) in Curriculum and Instruction with a major in Foreign and Second Language Education is a comprehensive program designed to prepare students to serve as teacher leaders, college instructors, as well as curriculum specialists, state testing specialists and textbook company representatives. Doctoral program graduates are specifically prepared to become university professors, researchers and leaders in the field. The program consists of preparing individuals in core areas: curriculum theory, learning theory, policy studies, research methods, and curriculum and instruction, in addition to subject-related knowledge and research skills. Degree candidates will be required to pass a qualifying examination in the form of a qualifying paper at the end of their first year in residence and a preliminary examination at the completion of the program of study (prior to writing and defending a prospectus of proposed research to be conducted for the dissertation). Official programs of study are constructed individually between doctoral students and their advisors.

Graduate Certificate in Teaching English to Speakers of Other Languages (TESOL)

The Teaching English to Speakers of Other Languages (TESOL) graduate certificate is a 12 graduate credit hour program designed for individuals who want to teach English as a foreign language overseas or who are interested in working with adult English language learners at the community college and/or university level in the United States. The TESOL Graduate Certificate is offered to degree-seeking graduate students from any major. The TESOL graduate certificate program is also available to non-degree seeking students. The certificate is comprised of a required methods course, two TSL course electives, and a field practicum experience.

Definition of Prefixes

EAP—English as a Second Language for Academic Purposes

FLE—Foreign Language Education

LIN—Linguistics

TSL—Teaching English as a Second Language

Graduate Courses

EAP 5835. Academic Spoken English for ITAs (3). (S/U grade only). This course is designed to help international teaching assistants improve their spoken English and develop communication and teaching skills necessary in a North American university classroom. The course focuses on both communication of field-specific content as well as interaction with university students. May be repeated to a maximum of nine semester hours.

EAP 5838r. English Pronunciation for International Teaching Assistants (3). (S/U grade only). This course is designed to help non-native English speakers improve pronunciation skills in order to become more competent and confident speakers of English; it provides learners with an understanding of the phonetic and phonemic structure of English and includes extensive speaking and listening practice. The course helps students develop an awareness of specific pronunciation features of North American English consonant and vowel sounds. Features of English rhythm and stress patterns are also analyzed and practiced. May be repeated to a maximum of nine semester hours.

EAP 5845r. Academic Writing for International Graduate Students (3). (S/U grade only). This course is designed to help international graduate students develop the skills they need to become successful writers in their academic careers. The course covers strategies to organize and develop ideas, navigate word and grammar choices particular to academic written English, avoid plagiarism and properly use citation and reference styles. May be repeated to a maximum of nine semester hours.

EAP 5855r. Academic English and Communication Skills for International Graduate Students (3). (S/U grade only.) In this course, international graduate students improve their academic English and communication skills for success in a graduate program at FSU. Students enhance their overall English skills, analyze differences in academic and cultural expectations, and learn about resources available to them at FSU. May be repeated to a maximum of 6 credit hours.

EAP 5860. Advanced English Practice for International Educators (3). (S/U grade only). This is an orally based individualized course in English as a second language, designed to provide practice in diagnosed problem areas.

FLE 5915r. Supervised Research (1–4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

LIN 5908r. Directed Individual Study (3). (S/U grade only). May be repeated to a maximum of nine hours.

LIN 5910r. Supervised Research (1–5). (S/U grade only). A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

LIN 5932r. Topics in Linguistics (3). In this course, different topics are selected to suit the needs and interests of students. A special effort is made to select topics related to current theoretical and practical issues. May be repeated to a maximum of twelve semester hours.

TSL 4945r. Associate Teaching in English as a Second Language (2–10). (S/U grade only). May be repeated to a maximum of ten semester hours. (Advanced Undergraduate Course)

TSL 5005. Theory and Methods in Teaching English Language Learners in PK-12 Classrooms (3). This course is designed for pre-service teachers in the elementary, special education and English education programs, who will teach limited English proficient and other linguistic minority students pre-K–12 in mainstream classrooms. The course introduces pre-service teachers to the theory and application of second language learning and instructional techniques for English Language Learners.

TSL 5142. Curriculum Design and Materials Development in Foreign and Second Language Education (3). This course begins with a review of L2 learning stages and of contemporary curricular designs that pertain to teaching foreign/second languages. Students learn to analyze existing curricula, materials and technology, and participate in the process of developing original units and materials.

TSL 5250. Applied Linguistics in Foreign/Second Language Teaching (3). This course builds an understanding of the systematic nature of language that serves second and foreign language educators' needs in their classroom practice. Using a cross-linguistic approach, this course examines language as a system and treats the various elements and sub-disciplines of language as patterned and interlinked, comparing and contrasting a variety of languages, learners, and speakers of those languages.

TSL 5325. English to Speakers of Other Languages (ESOL) Instruction in the Content Areas (3). This course is designed to prepare non-ESOL teachers to instruct English language learners in public school content areas (i.e., science, math, social studies) and non-content areas (i.e., physical education, art). Emphasis is on language-sensitive instructional planning and delivery, adaptation of instructional materials for enhanced comprehension, testing and placement of students, and cross-cultural awareness. It satisfies the teacher certification requirements for content area teachers. It is not part of the ESOL Endorsement required of primary language providers.

TSL 5345. Methodologies for Teaching Foreign and Second Languages (3). This course develops students' understanding of the field of foreign and second language education and the connections between theory and practice. Through this course, students become familiar with principles, practices, and classroom methodologies for teaching foreign and second languages in various educational settings.

TSL 5350. Pedagogical Grammar for Foreign and Second Language Teachers (3). This course builds foundational knowledge of grammatical concepts for foreign and second language pedagogy. Grammar teaching is often at the heart of foreign and second language (FSL) education.

TSL 5351. Form-Focused Instruction (3). This course is an overview of the research on form-focused instruction, the substantive area of foreign and second language education that includes any attempt to address linguistic forms in the second or foreign language classroom.

TSL 5377. Reading in Foreign Language Instruction (3). This course takes place against a backdrop of current theories, issues, and research in first and second language reading. In this course, students select from a range of reading approaches to develop reading units and activities for specific kinds of learners, including those with low literacy and L2 proficiency.

TSL 5440. Foreign/Second Language Testing and Evaluation (3). This course acquaints students with principles of second language assessment at the classroom and program levels and standardized testing. This course informs students of general principles of second language test construction and administration, including traditional and nontraditional assessments, and provides practical experiences in preparing valid items and analyzing tests.

TSL 5525. Crosscultural Communication for Foreign/Second Language Teachers (3). This course provides the foreign/second language educator with information related to crosscultural communication. Students explore the relationship between language and culture and focus on methods for fostering understanding between different cultural and subcultural groups. Educators gain understanding in major theories related to sociolinguistics and related implications for teaching a multilingual, multicultural student body.

TSL 5640. Seminar: Research in Second Language Learning and Teaching (3). This course is a comprehensive overview of second language learning and learners. Additionally, students examine the major theories and concepts associated with second language acquisition in naturalistic, classroom, and laboratory settings.

TSL 5660. Introduction to Second Language Acquisition (3). This course explores the key theories, debates, and controversies within the field of Second Language Acquisition through reading and critically evaluating relevant research.

TSL 5908r. Directed Individualized Study (1–3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

TSL 5915r. Supervised Research (1–4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

TSL 5930r. Seminar: Current Issues in Teaching TSL (1–3). This seminar is designed to be taken at the end of a student's program of study. It focuses on contemporary issues in teaching ESL/EFL important to one's professional understanding and participation in the field. The course is repeatable when different topics are listed for consideration. May be repeated to a maximum of nine semester hours.

TSL 5931r. Seminar: Special Topics in Applied Linguistics (2–3). This course addresses any topic relevant to the broader field of multilingual/multicultural education and may be repeated to a maximum of twelve semester hours.

TSL 5940r. Field Laboratory Internship (1–8). (S/U grade only). May be repeated to a maximum of eight semester hours.

TSL 5944. Foreign and Second Language Education in Practice (3). This course develops students' practical competence for teaching a foreign or second language (L2). The course focuses on topics and practices which improve students' practical knowledge of evidence-based methods, techniques, and procedures for teaching language skills and domains in a variety of foreign and second language settings. Students integrate theoretical perspectives with practice in in-class teaching demonstrations, development of lesson plans and original materials, and class observation, evaluation and management.

TSL 5947r. Supervised Teaching (1–4). (S/U grade only). May be repeated to a maximum of five semester hours.

TSL 5972r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

TSL 6371. Task-Based Language Learning and Teaching (3). This course examines the foundation for task-based language learning and teaching (TBLT) and contemporary issues at the core of TBLT, with a particular emphasis on current directions in research. The course focuses on research and practice in TBLT, and covers topics of needs analysis, curriculum, instruction, task design, teachers, learners, assessment, and program evaluation.

TSL 6641. Research Issues and Designs in Second Language Education (3). This course provides doctoral students with opportunities to become familiar with major issues in research in the field, to develop skills in the critical reading of research in several areas (L2 learning, teaching, policy, assessment, curriculum) and to begin extensive reading in their own areas of interest.

TSL 6661. Individual Differences and the Psychology of the Language Learner (3). This course examines the conceptual and empirical contribution of individual differences to theory and practice in second and foreign language (L2) learning. The course provides the competencies necessary to design and conduct empirical research on learner-specific factors underlying the different levels of individual success and attainment in L2 education.

TSL 6665. Instructed Second Language Acquisition (3). Prerequisite: TSL 5000. This course is an introduction to the methods, findings, and theoretical issues in research on instructed second acquisition, with a focus on contemporary research and perspectives.

TSL 6980r. Dissertation (1–12). (S/U grade only).

TSL 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

TSL 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

TSL 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

TSL 8976r. Master's Thesis Defense (0). (P/F grade only.)

TSL 8985r. Dissertation Defense (0). (P/F grade only.)

MATHEMATICS EDUCATION

Website: <http://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/mathematics-education-m-s-d>

Curricula for the major in Mathematics Education are offered which lead to the Master of Science (MS), the Specialist in Education (EdS), and the Doctor of Philosophy (PhD) in Curriculum and Instruction. Graduate curricula have been designed to meet the needs and professional goals of those preparing for various roles in mathematics education. Opportunities exist for graduate students to participate in major research projects that are setting new directions and further research for K-20 mathematics teaching and learning. Research among the faculty in mathematics education has focused on teacher education, mathematics curriculum, history of mathematics in mathematics education, undergraduate mathematics, and K-20 student learning.

Admissions

All degree levels require a minimum 3.0 upper-division grade point average (GPA) in previous work, GRE scores (writing score required for PhD), letters of recommendation, and a writing sample and/or written response to a prompt. Grades of "B" or higher in mathematics courses beyond the Calculus sequence are recommended for applicants for the MS, EdS, and PhD with a major in mathematics education.

Master's Degree

A program of study for the Curriculum and Instruction Mathematics Education major at the Master's level is designed based on student goals and degree elements. Degree elements include curriculum (three hours), teaching and learning (three hours), instructional technology (three hours), research and scholarship (three to six hours), and the major field of study (eighteen to twenty-one hours). To complete a master's degree, students may select either the thesis or non-thesis option. In the thesis option, students must take a minimum of twenty-four semester hours of graduate coursework (of which 18 hours must be letter-graded) and a minimum of six semester hours of thesis. Students will defend their thesis in an oral examination conducted by their supervisory committee. Students taking the non-thesis option must take a minimum of thirty-two semester hours of coursework (of which 21 hours must be letter-graded). These students have options for demonstrating successful completion of the program. During the first year in their program, students will select a supervisory committee consisting of a major professor and at least two additional members. The program of studies is planned with the student's supervisory committee to meet the specific needs and goals of the student while addressing the degree elements.

Master's Degree in Curriculum and Instruction with a Major in Mathematics Education (Part-time/Online)

For information on the online MS program in Curriculum and Instruction with a major in Mathematics Education, please see the Master of Science Degree in Curriculum and Instruction (Online Program, Thirty Hours) section of this *Graduate Bulletin*.

Specialist Program

The Specialist in Education degree is available to experienced teachers already holding a master's degree. Thirty-eight semester hours beyond the master's degree are required, with courses in curriculum theory (three hours), learning theory (three hours), policy studies (three hours), seminars (two hours), research methods core (twelve hours), and the major (fifteen hours). Program details will be decided upon by candidates in consultation with their supervisory committee comprised of a major professor and at least two other members. All candidates must pass a comprehensive examination at the completion of coursework.

Doctoral Program

Curriculum for the PhD in Curriculum and Instruction with a major in Mathematics Education is intended to prepare graduates for work in mathematics teacher education and mathematics education research. Tracks for those interested in undergraduate mathematics education, secondary mathematics education, and middle grades mathematics education are available. A

handbook for the PhD in Curriculum and Instruction provides specific information on milestones and expectations and is available from graduate faculty within the School of Teacher Education.

In general, four years will be required to complete coursework for the PhD. Depending on program faculty evaluation of graduate work already completed, a program of study is reviewed and approved by the student's supervisory committee. The coursework in mathematics education is divided into core and elective requirements. In exceptional circumstances the core requirements for the major can be varied by satisfactorily completing other courses in mathematics education that are deemed more appropriate for the student's career goals. Such variations must be approved by the major professor and supervisory committee.

The curriculum for this major reflects the degree elements required in the PhD: interdepartmental core courses (nine hours), research methods (minimum fifteen hours), departmental seminars (minimum two hours), mathematics education major or related courses (minimum fifteen hours), and dissertation (minimum twenty-four hours). Courses satisfying these elements are recommended by the faculty advisors. Additional courses may be required based on previous graduate coursework. Students are required to enroll for a minimum of twenty-four semester hours of dissertation credit. A student may enroll in dissertation hours after passing the preliminary examination. A prospectus is prepared and formally defended prior to conducting the doctoral research study.

Students are required to pass a diagnostic exam (which includes a written and oral component) before the end of the first year in the program. The objective of the diagnostic is to appraise the student's research aptitude and readiness to continue pursuing a doctoral degree and to facilitate advising in the development of the student's program of study. As part of this process, an advisory committee is established, a major professor is determined, and a program of study is planned.

Upon completion of formal coursework, a preliminary examination is taken. To be eligible to take the preliminary examination, the student must: 1) register for MAE 8964; 2) have an overall GPA of 3.0 for all graduate work completed; 3) have an approved program of study; 4) have successfully passed the diagnostic exam; 5) have completed the research element; and, 6) provide evidence of scholarship. The Preliminary Examination includes both an oral and written component. The written component is selected from the following: (1) an extensive literature review, (2) a solo-authored manuscript submitted for publication in a peer-reviewed journal, (3) a grant proposal for a research study, or (4) a comprehensive examination based upon questions from the supervisory committee. If a student selects to do a research study, then the prospectus must include a comprehensive literature review. Any written selection will include an oral defense component.

Prior to collecting data for the dissertation, candidates must successfully defend their written prospectus to their supervisory committee. The dissertation prospectus is prepared in consultation with the major professor and advisory committee. A formal defense will be scheduled at which the candidate will orally present the research plan. Once a signed copy of the prospectus has been filed with the College of Education, the dissertation research may then begin. The minimum time between having a prospectus approved by the academic dean and the dissertation defense is four months.

A student becomes a candidate for the Doctor of Philosophy in Curriculum and Instruction by passing the preliminary examination and may register for dissertation credit. When the committee determines the student is ready to defend the dissertation, a defense is scheduled. The candidate must provide a complete copy of the dissertation to committee members one month prior to the examination. In the semester in which the candidates expect to graduate, they must register for MAE 8985, Dissertation Defense.

Definition of Prefixes

MAE—Mathematics Education

Graduate Courses

MAE 5146. School Mathematics Curriculum (3). This course establishes a theoretical perspective and then major curriculum projects are examined and critiqued. Reform movements are considered in light of historical events and the current social climate.

MAE 5175. Teaching Community College Mathematics (3). Prerequisites: Graduate standing and MAC 2313; or instructor permission. This course provides a foundation in the teaching and learning of community college mathematics courses including introductory mathematics, introductory algebra, college algebra, trigonometry, calculus, and statistics. Topics include investigations into the conceptual nature of mathematics and applications in the community college mathematics curriculum.

MAE 5337. Seminar on the Teaching of Algebra (2).

MAE 5338. Seminar on the Teaching of Geometry (2).

MAE 5641r. Special Topics in Mathematics Education (2–3). This course covers innovative topics or specific assistance related to classroom topics in the teaching of mathematics. May be repeated to a maximum of eight semester hours.

MAE 5658. Using Technology in the Teaching of Mathematics (3). Prerequisite: One course in computers/technology or instructor permission. This course explores the uses of various technologies in mathematics classes, demonstrated through hands-on activities and experiences.

MAE 5690. Ethnomathematics (3). This course addresses the theoretical, practical, and research components that demonstrate the cultural bases of mathematics education. Mathematical activities from diverse cultures are shared and linguistic difficulties in math are discussed.

MAE 5691. Mathematics Learning and Teaching (3). Prerequisite: Instructor permission. This course introduces students to those theories of learning that have been historically influential, or which have the potential to be currently influential, in the learning and teaching of mathematics.

MAE 5795. Seminar on Research in Mathematics Education (2).

MAE 5865. Using History in the Teaching of Mathematics (3). This course examines the historical origins and evolution of key mathematics concepts. Topics are chosen from number systems, numeration, computation, number theory, algebra, geometry, analytic geometry, and calculus.

MAE 5908r. Directed Individual Study (1–3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

MAE 5915r. Supervised Research (1–4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

MAE 5942r. Field Laboratory Internship (1–8). (S/U grade only). May be repeated to a maximum of twelve semester hours.

MAE 5946r. Supervised Teaching (1–4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

MAE 5971r. Thesis (1–6). (S/U grade only). This course has a minimum of six semester hours required.

MAE 5973r. Specialist in Education Thesis (1–6). (S/U grade only). For this course a minimum of six semester hours required.

MAE 6148. Curriculum in Mathematics Education (3). This course is designed to provide students the opportunity to develop an initial theoretical framework in which to analyze mathematics curricula from a philosophical and psychological basis.

MAE 6797. Advanced Seminar on Research in Mathematics Education (4). Prerequisite: MAE 5795 or instructor permission. This course is an in-depth study of research in mathematics education. It covers development of research models for the investigation of specific types of research problems in mathematics education.

MAE 6938r. Doctoral Seminar in Mathematics Education (1–3). Prerequisite: Instructor permission. In-depth study of a topic in this field. Course topics currently include learning teacher education and curriculum. May be repeated to a maximum of twelve semester hours.

MAE 6939. Seminar in Mathematics Teacher Education (3). Prerequisite: Instructor permission. This course examines issues in mathematics teacher education at both the pre-service and in-service levels from theoretical and practical perspectives.

MAE 6980r. Dissertation (1–12). (S/U grade only).

MAE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

MAE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

MAE 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

MAE 8976r. Master's Thesis Defense (0). (P/F grade only.)

MAE 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

MAE 8985r. Dissertation Defense (0). (P/F grade only.)

READING AND LANGUAGE ARTS

Website: <http://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/reading-educationlanguage-arts-m-s-d>

The primary goal of Reading Education and Language Arts is to prepare professionals to work at various levels of instruction, early reading and writing development, K–12 school literacy, postsecondary reading programs, and adult literacy programs, as well as the preparation of college and university teacher educators in the area of literacy.

Reading Education and Language Arts is a graduate major leading to one of three degrees in Curriculum and Instruction: Master of Science (MS), Specialist in Education (EdS), and Doctor of Philosophy (PhD).

Master's Degree

The Master of Science (MS) degree is an advanced practitioner degree that offers a selection of courses in reading and language arts. These courses include the study of language, literature, and communication processes of reading, writing, speaking, and listening. Students become proficient in these areas and use this knowledge in their classroom instruction and assessment.

The master's degree program is designed for persons aspiring to be master classroom teachers, reading specialists, resource teachers, and reading and language arts consultants.

Curricula

The specialization in Reading Education and Language Arts leading to the master's degree requires thirty-three semester hours of coursework, including a core of five required reading certification courses and six additional courses to fulfill the master's degree. Students should work closely with an advisor to develop a program of study that meets the required elements of the degree.

Specialist Degree

The specialist degree in Curriculum and Instruction with a major in Reading Education and Language Arts is designed to meet advanced certification requirements and to prepare individuals for leadership roles in reading and language arts programs. Students who pursue this major choose from the same curricular options as those in the master's program but combine these courses with others available in the College and University. Students aspiring to be reading and language arts specialists study current theory and research and ways of applying this knowledge in clinical or field-based projects, public schools, community literacy programs, and state departments of education. Each program of study is tailored to the student's experience and professional aims. As part of this program, the student may elect to write a thesis or complete six semester hours of supervised research.

Curricula

The program of study leading to the specialist in education degree in Curriculum and Instruction with a major in Reading Education requires a minimum of thirty-three semester hours of coursework including from fifteen to eighteen semester hours in reading and language arts, an internship in an agency concerned with literacy education, and a course in methods of educational research. A thesis on a topic within reading and language arts is also required.

Doctoral Degree

The Doctor of Philosophy (PhD) degree in Curriculum and Instruction with a major in Reading Education emphasizes scholarly work in theoretical disciplines such as psychology, linguistics, sociology, or anthropology. From a disciplinary perspective, students select a content specialization such as reading theory, comprehension, children's literature, written composition, or adult literacy and address it from the standpoint of teaching and learning, development, or policymaking. Students study key research in the selected field of study, practice appropriate inquiry methods, and demonstrate the capacity to carry out independent scholarly investigation. The program is designed for persons aspiring to be college professors, scholars, researchers, or educational policymakers.

Curricula

The program of study leading to the Doctor of Philosophy degree in Curriculum and Instruction with a major in Reading Education requires forty-eight to fifty-eight semester hours of coursework and twenty-four semester hours of dissertation credit. The coursework includes research design and methods courses, foundation courses, a required core of twelve semester hours, and selection of one of the following curricular strands: reading theories and processes, clinical studies in reading and language arts, reading in the secondary school curriculum, adult literacy, children's literature, language and writing, or integrated curriculum studies in language arts.

Definition of Prefixes

LAE—Language Arts and English Education

LIS—Library and Information Studies

RED—Reading Education

Graduate Courses

LAE 5319. Teaching Oral and Written Expression in the Elementary School (3). This course focuses on observation, instruction, and evaluation of oral and written language in the elementary language arts classroom.

LAE 5415. Investigation in Children's Literature (3). This course is a review of the various areas of children's literature, recent trends in children's books, and research related to curriculum, reading interests, student's responses to literature, and development of taste in literature. Literature appropriate for children from birth to age fourteen is required reading.

LAE 5515. Language and Literacy Assessment (3). This course explores conventional and alternative forms of language and literacy assessment. Provides practice doing portfolio and performance assessments.

LAE 5738. Linguistic Research in Language Education (3). This course overviews the contributions of multiple disciplines to the study of language, literacy, and schooling.

LAE 6746. Theory and Research in Language Education (3). This advanced course in language education considers the psycholinguistic and sociolinguistic bases of language and the various methods for studying language; reading, writing, listening, and speaking.

LIS 5566. Multicultural Literature and Information Resources for Children and Young Adults (3). This course identifies and evaluates multicultural literature and information resources for children and young adults in relation to ethnicity and culture of ethnic minorities in the United States. Students locate, access, read, evaluate, and develop strategies to use multicultural literature and other resources to meet informational needs of children and young adults.

LIS 5567. International Literature for Children and Young Adults (3). This course provides graduate students an opportunity to read and evaluate literature for children and young adults from an international perspective, that is, literature originating in a nation other than the United States.

RED 5109. The Development and Assessment of Emergent Reading and Writing (3). This course reviews the beginning stages of literacy and ways adults can foster a child's development.

RED 5147. Foundations of Developmental Reading (3). Prerequisite: Admission to a graduate degree program in the School of Teacher Education. This course helps classroom teachers, reading specialists, and other educators seek answers to some of the problems related to reading needs of children of varying abilities.

RED 5337. Literacy Across the Content Areas (3). This course applies the reading process to the secondary school curriculum. Diagnostic procedures and instructional strategies useful in developing school reading programs.

RED 5546. Diagnosis of Reading Disabilities (3). Recommended prerequisite: RED 5147. This course reviews various types of reading problems and techniques for diagnosing these problems. This course also studies a variety of model diagnostic cases.

RED 5548. Correction of Reading Disabilities (3). Prerequisite: RED 4510 or RED 5147. This course provides teachers, reading specialists, and other educators with theoretical knowledge and expertise related to current procedures and instructional strategies for correcting reading disabilities.

RED 5646. Trends and Issues in Reading (3). Prerequisite: RED 4510 or RED 5147. This course is an exploration of current issues and recent trends in the teaching of reading with emphasis on developmental aspects, present practices, and implications of research in reading.

RED 5695. Policy Issues in Reading (3). Federal educational policy has targeted reading achievement through initiatives such as Reading Excellence, Reading First, Early Reading First, and the response-to-intervention approach of the Individuals with Disabilities Act of 2004. This course examines the role of reading research in these initiatives and discusses the challenges and potential solutions to implementing these policy initiatives in schools.

RED 5744. Using Literacy Research to Inform Practice (3). This course explores the most current research on what comprises effective literacy instruction, what it means for how we teach, and how to use emerging research to ensure that classroom instruction is as effective as it can be, so that all children have the opportunity to become proficient readers and experience academic success.

RED 5865. Leadership Practicum in Reading and Language Arts (3). This practicum is designed to provide individualized practicum experiences in educational agencies for advanced graduate students in reading and language arts.

RED 5906r. Directed Individual Study (1–3). May be repeated to a maximum of twelve semester hours.

RED 5911r. Supervised Research (1–5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three semester hours may apply to the master's degree.

RED 5945r. Supervised Teaching (1–5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three semester hours may apply to the master's degree.

RED 5947. Seminar and Practicum in Reading and Language Arts (3). (S/U grade only). This course is designed to provide field-based experience in public setting in conjunction with an on-campus seminar. Core readings are discussed.

RED 5971r. Thesis (3–6). (S/U grade only). A minimum of six semester hours is required.

RED 5973r. Specialist in Education Thesis (3–6). (S/U grade only).

RED 6747. Theory and Research in Reading (3). Prerequisite: RED 5147. This course helps students develop a broad knowledge of the research in reading and the ability to critically analyze and interpret studies in the field of reading.

RED 6938r. Doctoral Seminar in Reading and Language Arts (3). This course provides doctoral students with knowledge on current trends and issues in the field of reading education. Specifically, the seminar includes consideration of theoretical and empirical perspectives; integration of research, practice, and policy; and multi-disciplinary perspectives. May be repeated to a maximum of twelve semester hours.

RED 6980r. Dissertation (1–12). (S/U grade only).

RED 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

RED 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

RED 8968r. **Specialist in Education Comprehensive Examination (0).** (P/F grade only.)

RED 8976r. **Master's Thesis Defense (0).** (P/F grade only.)

RED 8978r. **Specialist in Education Thesis Defense (0).** (P/F grade only.)

RED 8985r. **Dissertation Defense (0).** (P/F grade only.)

SCIENCE EDUCATION

Website: <http://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/science-education-m-s-d>

Curricula in science education lead to the Master of Science (MS), Specialist in Education (EdS), and Doctor of Philosophy (PhD) degrees in Curriculum and Instruction with a major in Science Education.

Graduate curricula are designed to meet the needs and professional goals of those preparing for leadership roles in science education. Graduate students have many opportunities to participate in ongoing research and development, in conjunction with program faculty members, in addition to their thesis or dissertation research. Recent research activities have demonstrated how teacher beliefs shape students' access to three-dimensional science learning, the role of emotions in science learning, and teachers' use of cognitively demanding tasks.

Master's Degree in Curriculum and Instruction with a Major in Science Education (Part-time/Online)

For information on the online MS program in Curriculum and Instruction with a major in Science Education, please see the Master of Science Degree in Curriculum and Instruction (Online Program, Thirty Hours) section of this *Graduate Bulletin*.

Curricula

To complete the master's degree requires the successful completion of a thesis, portfolio, or comprehensive examination and successful completion of a minimum of thirty-three semester hours of coursework with a graduate GPA of 3.0. The program of study is planned with the student's major professor and supervisory committee to meet the specific needs and goals of the student. Information regarding sample programs may be obtained from the science education faculty or through the science education Web site. Students defend their thesis or portfolio in an oral examination conducted by the supervisory committee that they have formed.

Specialist in Education

Curricula

A minimum of thirty semester hours of coursework with a GPA of 3.0 and successful completion of a thesis, portfolio, or comprehensive examination is required. The program of study is planned with the student's major professor and supervisory committee to meet the specific needs and goals of the student. Information regarding sample programs may be obtained from the science education office or through the science education homepage. Students defend their thesis or portfolio in an oral examination conducted by the supervisory committee that they have formed.

Doctoral Degree

Curricula

Each candidate plans a program of studies tailored individually with a major professor and supervisory committee, but all programs include the following components: interdepartmental core (nine hours minimum); introductory seminars (two hours); science education (twenty-one hours minimum); dissertation in science education (twenty-four semester hours minimum); and research methods (twenty semester hours minimum).

Post-baccalaureate study, including relevant courses completed in the master's degree, may be used to meet the curricular requirements. However, all candidates must complete at least forty-five semester hours of graduate study in residence at Florida State University; thirty-six of these semester hours must be in science and science education.

Candidates are required to pass a qualifying examination at the end of their first year in residence. When the candidate has six or fewer hours of coursework to complete, the preliminary examination which covers the program of studies may be taken.

Students will complete a dissertation that is directly related to substantive questions in science education. Students must enroll for a minimum of twenty-four semester hours of dissertation credit. Prior to collecting data for the dissertation, candidates must successfully defend their written prospectus to their supervisory committee. When the dissertation is completed, the candi-

date defends it in an oral examination conducted by the supervisory committee. Students actively writing their dissertation must enroll for a minimum of two semester hours of dissertation credit each semester they are writing.

The coursework in science education is divided into core and elective requirements. In exceptional circumstances the core requirements can be varied by satisfactorily completing other courses in science education that are deemed more appropriate for the student's career goals. Such variations must be approved by the major professor and supervisory committee.

Definition of Prefixes

SCE—Science Education

Graduate Courses

SCE 5140. Curriculum in Science Education (3). This course provides opportunities for students to develop both a practical and theoretical basis to analyze science curricula. The course focuses on the utilization of philosophical and psychological foundations to analyze current curriculum materials available for science classes.

SCE 5147. Perspectives on Learning in Science Education (3). Prerequisite: SCE 5947. Corequisites: SCE 5336 and SCE 5945. This course examines different learning theories or perspectives that influence how science curricula, technology-enhanced environments, and instructional strategies are conceptualized, designed, implemented, and studied.

SCE 5332. Methods for Teaching Science in Secondary Schools (3). This course provides an opportunity for prospective secondary-science educators to learn more about learning, teaching, curriculum development, and assessment in science. Requires thirty hours of field work in a local secondary school.

SCE 5336. Instructional Strategies (3). Corequisite: SCE 5945. This course examines several different instructional, metacognitive, and assessment strategies that have been shown to foster students' understanding and retention of key science concepts.

SCE 5340. Teaching and Learning Science (3). This course provides opportunities for students to examine predominant psychological models of human cognition, the evolving nature of science knowledge, and the role of the teacher in assisting students to learn science with understanding.

SCE 5545. Teaching Science in Diverse Classrooms (3). This course examines the implications of "science for all," with a particular emphasis on the interactions of students' culture and culture of science. This examination is followed by a description of instructional congruence and its role in helping all students move toward scientific literacy. The course culminates with the identification of practices that allow for cultural congruence and the application of these practices in the design and enactment of an instructionally congruent unit of science teaching.

SCE 5642. Science Teaching and Education Policy (3). This course assists pre-service and in-service science teachers in understanding the issues associated with science education and policy from a historical and futuristic perspective.

SCE 5740. Research Methods in Science Education (3). This course is a comprehensive survey of research methodology used in studying science education. Students develop skills in interpreting both qualitative and quantitative studies, with particular emphasis placed on qualitative methodologies.

SCE 5895. Disciplinary Engagement in Science (3). This course examines the nature of scientific knowledge and how the particular actions involved in scientific inquiry influence the characteristics of the knowledge it produces. The course also examines the role of the nature of science knowledge in a broader scientific literacy with an explanation of how to support students in constructing that knowledge.

SCE 5905r. Directed Individual Study (1-3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

SCE 5910r. Supervised Research (1-4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

SCE 5921r. Colloquium (1). (S/U grade only). This course discusses current trends in science teaching. Enrollment limited to master's or doctoral students in science or science education. May be repeated to a maximum of eight semester hours.

SCE 5935r. Special Problems in the Teaching of Secondary School Science (1-3). May be repeated to a maximum of nine semester hours.

SCE 5942. Internship for Graduate Students (1-10). (S/U grade only).

SCE 5943r. Field Laboratory Internship (1-8). (S/U grade only). May be repeated to a maximum of sixteen semester hours.

SCE 5946r. Supervised Teaching (1-4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

SCE 5949r. Field Lab Internship (1-3). This course assists teachers in updating and improving content knowledge, pedagogical knowledge, and pedagogical content knowledge with structured guidance by faculty. May be repeated to a maximum of nine semester hours.

SCE 5954. Portfolio Defense (0). (P/F grade only.) Prerequisite: Completion of all master's degree coursework. This course is a master's portfolio defense. Portfolio must be submitted in the first month of classes in the semester of graduation.

SCE 5971r. Thesis (1-6). (S/U grade only). A minimum of six semester hours is required.

SCE 5973r. Specialist in Education Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

SCE 6345r. Teaching and Learning Science (3). This course enables graduate students to develop an understanding of psychological models and how they apply to teaching and learning of school science.

SCE 6351. Curriculum Design in Science (3). This course provides opportunities to learn and apply the principles of curriculum design, implementation, and evaluation in science. The course emphasizes analysis of implemented science curricula in terms of philosophical and psychological models, the roles of teachers and students and external forces.

SCE 6395. Science Teacher Education (3). This course investigates sources of teacher knowledge and explores strategies for improving science teacher performance. Common approaches to staff development are studied and analyzed and innovative approaches are developed and evaluated in terms of theory and research on teaching.

SCE 6742. Modeling the Mind (3). This course explores several research traditions and influential approaches to modeling cognition within STEM education research, starting with unitary models of mind (such as misconceptions and framework theory) to focusing more extensively on resource-based models (such as the knowledge-in-pieces framework), interactional accounts, dynamic system theory, and issues of power and ideology in learning. Students examine the theoretical models' main features and underlying assumptions; engage in critical analysis of accounts of cognition; compare and contrast across models; and analyze evidence to support or challenge the models.

SCE 6761r. Research, Recent Developments, and Current Issues in Science Education (3–5). May be repeated to a maximum of ten semester hours.

SCE 6922r. Colloquium in Science Education (1). (S/U grade only). This course consists of analyses of theory, policy, and research which have implications for science and science education at the local, state, national, and international levels. May be repeated to a maximum of eight semester hours.

SCE 6938r. Advanced Seminar in Science Education (2). This course consists of a sequence of four courses for doctoral students in science education. The courses are: researchable questions in science education; professional writing; current policy issues in science education; and a review of literature in science education. May be repeated to a maximum of eight semester hours.

SCE 6980r. Doctoral Dissertation (1–12). (S/U grade only).

SCE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

SCE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

SCE 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

SCE 8976r. Master's Thesis Defense (0). (P/F grade only.)

SCE 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

SCE 8985r. Dissertation Defense (0). (P/F grade only.)

SOCIAL SCIENCE EDUCATION

Website: <http://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/social-science-education-m-s-d>

The purpose of the graduate major is to prepare professionals in the field of Social Science Education. The program offers the following degrees in the areas of Social Science Education:

1. A post-certification master's degree in Curriculum and Instruction with a major in Social Science Education
2. A combined bachelor's and master's (BS/MS) pathway in Curriculum and Instruction with a major in Social Science Teaching that requires a portfolio for graduation
3. A PhD in Curriculum and Instruction with a major in Social Science Education

Social Science Education Combined Bachelor and Master of Science (BS/MS) Pathway

The three-year Combined Bachelor's/Master's Pathway in Social Science Education starts in the junior year and results with the conferral of a Bachelor of Science in Social Science Education and a Master of Science in Social Science Teaching, with initial Florida DOE certification in K-12 Social Science Teaching at the master's degree level. See the *Undergraduate Bulletin* for more details.

Master's Degree in Curriculum and Instruction with a Major in Social Science Education

The Master of Science in Curriculum and Instruction with a major in Social Science Education requires a minimum of thirty graduate semester hours. The program is most appropriate for individuals who are already certified in social science education and wish to update or increase their knowledge of the field or who plan to proceed to doctoral studies. While not an initial teacher certification program, this degree program provides opportunities for students to develop leadership and research skills, as well as expand knowledge in a student-selected areas of social science education.

Master's Degree in Curriculum and Instruction with a Major in Social Science Education (Part-time/Online)

For information on the online MS program in Curriculum and Instruction with a Major in Social Science Education, please see the Master of Science Degree in Curriculum and Instruction (Online Program, Thirty Hours) section of this *Graduate Bulletin*.

PhD in Curriculum and Instruction with a Major in Social Science Education

The doctoral program (PhD) in Curriculum and Instruction with a major in Social Science Education is a comprehensive program designed to prepare individuals to serve in academic and leadership roles in the field. Each candidate plans a program of studies tailored individually with a major professor and supervisory committee. The coursework in social science education is divided into core and elective requirements, culminating in the completion of a dissertation in a selected area of specialization.

Definition of Prefixes

SSE—Social Science Education

Graduate Courses

SSE 5195. Developing a Global Perspective (3). Prerequisites: EDG 5208 and SSE 5367. This course examines theory and practice in global education and its integration into curriculum and pedagogy in social sciences and social studies education. The course evaluates major issues and controversies embedded in the field, and enables students to critique scholarship, and propose ideas for integrating global perspectives in instruction.

SSE 5367. Fundamentals in Teaching Social Studies (3). Pre- or corequisite: EDG 5208. This course explores the rationale for social science instruction and examines traditional social science instructional methods.

SSE 5386. Goals and Methods for the Teaching of History (3). This course is a survey of the major approaches to the study of history linked to the goals of history instruction in general education, with attention to various methods for teaching history.

SSE 5391. Teaching Global Issues (3). This course examines prevalent global issues in the United States and foreign countries using the pedagogy in social sciences and social studies education. The course evaluates major issues and controversies embedded in the field, and enables students to critique scholarship, and propose ideas for integrating global perspectives in instruction.

SSE 5665. Inquiry in Teaching Social Studies (3). Prerequisites: EDG 5208 and SSE 5367. This course provides theory and practice in discovery, problem solving, and inquiry teaching of social science.

SSE 5720. Shaping Social Studies Teaching and Learning through Technology (3). This course examines how technology can enhance or hinder teaching social studies subject areas in middle and high school classrooms. The course provides students with opportunities to explore educational technology that specifically enhance social studies teaching objectives.

SSE 5907r. Directed Individual Study (1–3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

SSE 5915r. Supervised Research (1–4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

SSE 5937r. Special Topics in Social Science Education (3). This course is an analysis of selected topics in social science education. May be repeated within the same term to a maximum of nine semester hours.

SSE 5943. Field Laboratory Internship (1–8). (S/U grade only). Prerequisites: EDG 5208 and SSE 5367.

SSE 5946r. Supervised Teaching (1–4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

SSE 5947. Internship for Graduate Students (1–10). (S/U grade only).

SSE 5971r. Thesis (1–6). (S/U grade only). A minimum of six semester hours is required.

SSE 6933. History of Social Studies/Social Science Education (3). This course is an historical examination of the search for a curriculum rationale, adequate content, appropriate scope and sequence, and effective instructional practice in social studies/social science education, grades K–12.

SSE 6980r. Dissertation (1–12). (S/U grade only).

SSE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

SSE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

SSE 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

SSE 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

SSE 8985r. Dissertation Defense (0). (P/F grade only.)

SPECIAL EDUCATION

Website: <http://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/special-education-m-s-d>

The purpose of the Special Education graduate major is to prepare professionals to respond to the unique needs of children, youth, and adults with disabilities. The program offers master's degrees in the areas of Special Education (for traditional graduate students), Special Education Teaching (for initial certification students; three-year BS/MS combined pathway), and Visual Disabilities; an education specialist (EdS) degree; and a PhD in Special Education.

Master's Degree in Curriculum and Instruction with a Major in Special Education

Special Education Teaching Combined Bachelor and Master of Science (BS/MS) Pathway

The three-year Combined Bachelor's/Master's Pathway in Special Education starts in the junior year and results with the conferral of a Bachelor of Science in Special Education and a Master of Science in Special Education Teaching, with initial Florida DOE certification in K-12 Special Education Teaching with ESOL, Reading, and Autism endorsements at the master's degree level. Students in the Combined Bachelor's/Master's Pathway select a specialization area from the following: autism spectrum disorders, intellectual disability, or high incidence disabilities.

Special Education – MS Degree in Curriculum and Instruction

The Master of Science in Curriculum and Instruction with a major in Special Education requires a minimum of thirty-three semester hours. The program is most appropriate for individuals who are already certified in an area of special or general education or for individuals wishing to update or increase their knowledge of special education. While not a teacher certification program, the Master of Science in Curriculum and Instruction with a major in Special Education program provides opportunities for students to develop leadership and research skills, as well as expand knowledge in a student-selected area of special education. Students select a specialization area from autism spectrum disorders, early childhood special education, and high incidence disabilities.

Specialist in Education

Specialist in Education Program (EdS)—Special Education

The specialist in education is an advanced master's degree with admission requirements identical to the master's degree. Applicants to the EdS program in Curriculum and Instruction should already hold a master's degree in an area of special education or related field. The purpose of this program would be to expand the applicant's skills and knowledge in his/her current area of preparation or to extend skills and knowledge to another area of special education.

Doctoral Degree

PhD in Curriculum and Instruction with a Major in Special Education

The doctoral program (PhD) in Curriculum and Instruction with a major in Special Education is a comprehensive program designed to prepare selected individuals to serve in leadership roles in the education of individuals with disabilities (including visual impairment). The program consists of preparing individuals in three core areas: administration, university teaching, and research. Each student is expected to develop minimum knowledge and skills in each of the three core areas, although the student can emphasize one of the three.

Individuals interested in the doctoral degree program should contact the graduate coordinator to request a booklet that explains admission requirements, course of study, financial assistance available, and research interests of the graduate faculty.

Definition of Prefixes

EEX—Education: Exceptional Child-Core Competencies

EMR—Education: Mental Retardation

Graduate Courses

EEX 5017. Typical and Atypical Early Development (3). This course focuses on typical and atypical development in the early years (birth through 8 years). Particular attention is paid to factors influencing development and the impact of disabilities and biomedical risk factors on learning, development, and behavior. Recent research and its implication for evidence-based practices is a major component of the course.

EEX 5078. Teaching High Risk Adolescents in Alternative Settings (3). This course examines teaching in alternative settings (e.g., alternative schools, juvenile justice facilities, therapeutic residential treatment centers). Students learn how to (a) overcome the barriers and capitalize on the facilitation factors to providing effective instruction in these settings, (b) identify and plan lessons incorporating evidence based instruction for high risk adolescents, and (c) collaborate with personnel in both the alternative and regular educational settings to support students.

EEX 5087. Middle and Secondary Curriculum for Learners with Disabilities (3). This course assists participants to develop curricular planning skills for middle and high school students with disabilities. Emphasis is placed on evidence-based instructional strategies appropriate for teaching middle and high school students receiving special education services.

EEX 5089. Adaptations and Accommodations for Learners with Disabilities (3). This course provides information regarding adaptations and supports that enhance the education of children and youth with learning and behavior challenges. Emphasis is placed on procedures that adapt the general education curriculum.

EEX 5095. Teaching Learners with Autism Spectrum Disorder (1). This course provides a comprehensive overview of autism spectrum disorder (ASD). The impact the characteristics of ASD have on student participation and learning in the general education curriculum, and adaptations to enhance and support learning while emphasizing individual goals and objectives are addressed.

EEX 5210. Assessment and Diagnosis of Autism Spectrum Disorder and Intellectual Disability (3). This course provides students with an understanding of the core features associated with and diagnostic criteria used to identify autism spectrum disorder (ASD) and intellectual disability (ID). Students learn a transdisciplinary framework for the assessment process, and develop the skills necessary to identify, design, and administer assessments used to build appropriate, assessment-driven educational plans.

EEX 5225. Assessment of Students with Disabilities (3). This course provides students with competency in the assessment of students with disabilities. In addition to exploring issues related to assessment, the course focuses on the administration and interpretation of formal instruments and informal assessment procedures.

EEX 5234. Development and Assessment of Individuals with Severe Cognitive Disabilities and Autism Spectrum Disorder (3). This course examines the knowledge and skills necessary to understand the effects of severe cognitive disabilities (SCD) and autism spectrum disorder (ASD) on development and learning. Participants learn to assess academic and functional achievement of individuals with SCD and ASD in a variety of areas that impact academic and functional outcomes for these individuals.

EEX 5235. Instructional Environments: Ethical, Legal, Safety, and Classroom Management Considerations (3). This course is designed to provide participants with the knowledge and skills necessary to organize the physical, social, and instructional environment of a classroom that includes a heterogeneous group of learners.

EEX 5237. Methods for Teaching Students with Low Incidence Disabilities (3). This course offers an overview of curriculum and instructional needs of students with low incidence disabilities.

EEX 5239. Assessment and Methods in Early Childhood Special Education (3). Prerequisite: EEX 5017. This course focuses on the formal and informal evaluation techniques and individualized instruction for young children with disabilities.

EEX 5246. Mathematics for Students with Disabilities (3). This course equips teachers to address the needs of learners with high incidence disabilities in grades K-12 when teaching mathematics skills. Methods and techniques learned are appropriate for a variety of classroom settings.

EEX 5248. Positive Behavior Support (3). This course provides participants with the knowledge and skills necessary to develop, implement, and evaluate the impact of positive behavior supports. Course content is organized around the Pyramid Model that includes three tiers of behavior management based on principles of positive behavior support (PBS).

EEX 5258. Advanced Reading Instruction for Students with Disabilities (3). This course examines methods for assessing and teaching reading skills to individuals with disabilities.

EEX 5259. Literacy for Learners with Disabilities (3). This course introduces the major reading components of scientifically-based reading research as applied to learners with disabilities: phonological awareness, phonics, fluency, vocabulary, and comprehension. Additional topics include models of typical and atypical reading development and principles and practices of differentiated instruction.

EEX 5267. Differentiating Mathematics Instruction in Middle and High School (1). This course provides an overview of the purpose and rationale for differentiated instruction in middle and high school mathematics classes. Classroom strategies for differentiating mathematics and ways to relate to initial assessments (diagnostic) and assessment for learning (formative) to these strategies are examined.

EEX 5286. Preparing Individuals for Transition (3). This course focuses on planning and implementing appropriate transitional services for youths with disabilities in the public schools.

EEX 5298. Teaching Students with Autism (3). This course provides teacher candidates with the knowledge needed to develop effective communication, social, and language assessments and interventions for individuals with autism spectrum disorder. Emphasis is placed on establishing appropriate learning goals and implementing research-based instructional methods to maximize each learner's progress and access to the general education curriculum. An overview of the characteristics of autism spectrum disorders (ASD) is provided.

EEX 5456. Program Development for Young Children with Disabilities (3). This course focuses on issues related to providing comprehensive services to young children with disabilities. Emphasis is placed on topics surrounding the development and evaluation of developmentally appropriate programs, family-focused intervention, providing services in normalized settings, and the utilization of evidence-based practices for children birth to age five years who are developmentally delayed, are at risk for developmental delay, or who have a specific disability.

EEX 5466. Universal Design for Learning (1). This course examines Universal Design for Learning (UDL) as a framework for addressing the educational needs of K-12 learners. Elements of UDL to be discussed include teaching content in multiple formats so that all students can access it, providing students with various ways to demonstrate their learning, and stimulating students' interests and motivation for learning in a variety of ways.

EEX 5615. Nonviolent Crisis Intervention (1). This course provides class participants with skills in non-physical methods for preventing or managing disruptive behavior, including positive behavior support (PBS) at the tertiary level. In addition, the course includes the study of crisis prevention methods including restraint positions, transport techniques and team strategies. Students who successfully complete the course are eligible for a two-year Crisis Prevention Institute (CPI) blue card that validates their completion of the Nonviolent Crisis Intervention training program.

EEX 5704. Early Childhood and Elementary Education Curriculum for Special Educators (3). This course provides special educators with knowledge of general early childhood and elementary curriculum. Emphasis is placed on evidence-based supports, modifications, and accommodations to allow the child with disabilities to access the general education curriculum.

EEX 5708. Teaming with Families, Schools and Community (3). This course provides students with the knowledge and skills to collaborate and team with professionals from a variety of disciplines in the schools and other community agencies, to include family members in the collaboration process, and to support families of children with disabilities throughout the life cycle.

EEX 5765. Introduction to Special Education Technology (3). This course introduces the way technology (specifically computers) is used with special education students.

EEX 5767. Augmentative and Alternative Communication (AAC) for Learners with Autism Spectrum Disorder (3). This course provides students with knowledge of best practices in facilitating communication and learning of children and youth with complex communication needs including those with autism spectrum disorder (ASD) and other developmental disabilities in school settings. This course focuses on the use of assistive technologies including augmentative and alternative communication (AAC) to enhance student participation in social and academic learning opportunities. Emphasis is placed on effective assessment and instruction for AAC and other assistive technology users.

EEX 5774. Collaborative Transition and Career Planning for Students with Severe or Profound Disabilities (3). This course teaches the planning and implementation of appropriate transition services for students with severe and profound disabilities in the schools at the secondary and post-secondary levels.

EEX 5835. Practicum with Learners with High Incidence Disabilities (3). This course provides experience developing, implementing, and evaluating functional and academic intervention programs for K-12 learners with high incidence disabilities. Additional content includes designing, implementing, and evaluating large and small group activities; evaluating learning environments; and working with a team of professionals and instructional assistants.

EEX 5836r. Practicum with Students with Autism Spectrum Disorder and Severe Intellectual Disabilities (1-3). This course provides participants with experience developing, implementing, and assessing intervention programs for learners identified as having autism spectrum disorder. May be repeated to a maximum of three credit hours.

EEX 5841r. Field Laboratory Internship (1-12). (S/U grade only). This is a practicum course covering specific areas of in-depth field experiences in special education. May be repeated to a maximum of twelve semester hours. Offered Fall and Spring semesters only.

EEX 5863r. Supervised Teaching (1-4). (S/U grade only). A maximum of three hours may apply to the master's degree.

EEX 5906r. Directed Individual Study (1-3). May be repeated to a maximum of twelve semester hours. Not offered Summer term.

EEX 5911r. Supervised Research (1-4). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

EEX 5920. Pre-Student Teaching Seminar (1). (S/U grade only). This course prepares students for student teaching. Paperwork requirements, as well as professional behavior and ethics, are covered.

EEX 5931r. Special Topics in Special Education (1-3). This course is an investigation of a variety of topics in special education. May be repeated to a maximum of nine (9) credit hours; repeatable within the same term.

EEX 5940r. Practicum in Early Childhood Special Education (3). This practicum gives experience working with atypical infants, toddlers, preschoolers, and their families. May be repeated to a maximum of six semester hours.

EEX 5943r. Practicum in Transition (3). In this practicum, students are given an opportunity to directly apply their skills in one of several transitional programs in the schools or the community. May be repeated to a maximum of nine semester hours.

EEX 5971r. Thesis (1-6). (S/U grade only). A minimum of six semester hours are required.

EEX 5973r. Specialist in Education Thesis (1-6). (S/U grade only). A minimum of six semester hours are required.

EEX 6301r. Seminar: Research Problems in Special Education (1). (S/U grade only). This seminar focuses on current research topics drawn from broad areas associated with special education. May be repeated to a maximum of six semester hours.

EEX 6341. Critical Review of Special Education Research (3). This course is an analysis and synthesis of research areas relating to exceptional individuals.

EEX 6342. Seminar: Readings in Education, Training, and Treatment of Exceptional Individuals (3). This course is a comprehensive study of special education literature in a variety of areas.

EEX 6426. Research and Practices in Special Education Personnel Development (3). This course is a study of professional preparation of individuals serving exceptional individuals.

EEX 6935r. Doctoral Seminar in Special Topics (1-3). (S/U grade only). This course is an investigation of a variety of topics in special education. May be repeated to a maximum of nine credit hours; repeatable within the same term.

EEX 6980r. Dissertation (1-12). (S/U grade only).

EEX 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

EEX 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

EEX 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

EEX 8976r. Master's Thesis Defense (0). (P/F grade only.)

EEX 8985r. Dissertation Defense (0). (P/F grade only.)

EMR 5235. Teaching the Student with Profound Disabilities (3). This course provides course participants with the knowledge and skills to implement and evaluate intervention for students with profound disabilities. Emphasis is placed on evidence-based practices that support access to the general education curriculum and functional skill development.

EMR 5803. Advanced Practicum in Mental Disabilities (3). This course provides experience in developing, implementing and evaluating individualized educational programs for learners identified as having severe mental disability.

VISUAL DISABILITIES

Website: <http://education.fsu.edu/degrees-and-programs/curriculum-and-instruction/visual-disabilities-m-s>

The purpose of the visual disabilities graduate major is to prepare professionals to provide appropriate services to individuals who are blind or who have low vision. The program offers master's degrees that lead to the development of skills that are required by professionals working with children (for initial certification students; a three-year combined BS/MS pathway program), and that focus on the preparation of orientation and mobility specialists.

Master's Degree in Curriculum and Instruction with a Major in Visual Disabilities

Visual Disabilities Combined Bachelor and Master of Science (BS/MS) Pathway

The three-year Combined Bachelor's/Master's Pathway in Visual Disabilities starts in the junior year and results with the conferral of a Bachelor of Science in Visual Disabilities Education and a Master of Science in Visual Disabilities. See the *Undergraduate Bulletin* for more details.

Visual Disabilities – MS Degree in Curriculum and Instruction

This major is designed as a leadership program with emphasis in orientation and mobility. The program of study and the length of the program is based upon the applicant's prior academic preparation and interests. Students who complete this program meet the eligible criteria for national certification in orientation and mobility from the Academy for Certification of Vision Rehabilitation and Education Professionals (ACVREP).

Visual Disabilities Studies – MS Degree in Curriculum and Instruction (Online)

The part-time/online Master's Degree in Curriculum and Instruction with a major in Visual Disabilities Studies is designed for beginning and experienced teachers and other educators who are committed to providing effective educational services to meet the specialized needs of students who are blind or who have low vision. Educators in this program will participate in local field experiences to refine the strategies and techniques learned in the program. **Note:** *This program does not lead to teacher certification as it is an advanced program designed for current teachers.*

Coursework for the online master's degree in C&I: Visual Disabilities Studies includes:

EVI 5317 Unified English Braille

EVI 5371 Foundation of Teaching Students with Visual Impairments

EVI 5xxx Anatomy of the Eye and Low Vision

EVI 5310	Teaching Students with High Intensity Needs and Visual Impairments
EVI 5xxx	The Expanded Core Curriculum and Students with Visual Impairments
EVI 5xxx	Teaching Braille Codes
EVI 5313	Supporting Literacy Instruction for Students with Visual Impairments
EVI 5xxx	Access to Learning Media for Students with Visual Disabilities
EVI 5018	PK-12 Students with Visual Impairments: Assessment Methods
EEX 8966	Comprehensive Examination

Specialist in Education

Specialist in Education Program (EdS) – Visual Disabilities

The specialist in education degree (EdS) is an advanced master's degree with admission requirements identical to the master's degree. Applicants to the EdS in Curriculum and Instruction with a major in Visual Disabilities program should already hold a master's degree in an area of visual disabilities education or a related field. The purpose of this program would be to expand the applicant's skills and knowledge in his/her current area of preparation or to extend skills and knowledge to another area of special education.

Definition of Prefixes

EVI—Education: Visually Impaired-Blind

Graduate Courses

EVI 5018. PK-12 Students with Visual Impairments: Assessment Strategies (3). This course introduces the basic concepts, principles, and procedures of assessment and applied behavior analysis in the practice of providing services to students with visual impairments, their families, and the educational personnel who work with them. Students develop skills of observation, interviewing, developing performance-based measures, including progress monitoring, to determine students' needs and to establish and maintain positive learning environments in which students have the opportunity to demonstrate success.

EVI 5019. Foundations of Rehabilitation Teaching of the Blind (3). This course presents an overview of the rehabilitation teaching profession and provides practical experience in the basic procedures of rehabilitation teaching. Students develop and apply assessment tools, training plans, and evaluation instruments within an andragogical model.

EVI 5131. Teaching Deaf-Blind/Multisensory Impaired Individuals (3). This course teaches students skills and knowledge to teach deaf-blind/multisensory impaired individuals.

EVI 5221. Applied Methods of Orientation and Mobility (3). Prerequisites: EVI 4121, EVI 4220, and EVI 4314 or EVI 5316. This course explores the methods and strategies for teaching independent travel techniques to learners with visual impairments. The course presents and discusses methods, strategies, and information related to the teaching of independent travel skills. Emphasis is on travel within indoor environments.

EVI 5222. Advanced Orientation and Mobility (3). Prerequisites: EVI 4121, EVI 4220, EVI 4314 or EVI 5316, and EVI 5221. This course covers methods in general navigation and environmental awareness for learners with visual impairments. Travel skills and techniques are gained while working under simulated conditions in various environments, through the use of existing sensory modalities and appropriate mobility techniques. Emphasis is on travel within the outdoor environment.

EVI 5226. Developmentally Appropriate Orientation and Mobility (3). Prerequisite: Instructor permission. This course provides the student with knowledge identifying developmentally appropriate orientation and mobility skills for young children ages birth to five. In addition, the students are able to assess and plan for orientation and mobility interventions for this age group.

EVI 5227. Teaching Orientation and Mobility to Individuals with Unique Health Considerations (3). Prerequisites: EVI 4220, EVI 5221, and EVI 5226. Corequisite: EVI 5222. This course teaches future orientation and mobility specialists unique and creative strategies for teaching the alternate skills that are necessary for individuals who are blind and have additional disabilities to be safe, efficient travelers. The course also emphasizes how to apply critical thinking and problem solving to conditions not covered specifically in this course that may arise in one's practice as a professional in the field of visual impairment.

EVI 5245. Expanded Core Curriculum for Students with Visual Impairments (3). This course prepares certified teachers with in-depth understanding and knowledge of and strategies to assess and provide instruction in the Expanded Core Curriculum, a unique curriculum designed to teach children who are blind or visually impaired due to their lack of incidental learning.

EVI 5255. Methods of Independent Living of the Blind (3). This course is designed to teach students techniques of daily living for persons with vision loss, methods of writing lesson plans for the adaptive techniques, and opportunities to teach the skills learned in class.

EVI 5310. Teaching Students with High Intensity Needs and Visual Impairment (3). Prerequisite: EVI 5316 or EVI 5367. This course introduces students to the techniques and strategies necessary for meeting the needs of students with visual impairments who have additional disabling conditions. The course places emphasis upon working with both blind and low vision students who have cognitive impairments. Students develop skills in observation, assessment, learning, and instruction of these complex students.

EVI 5313. Supporting Literacy Skill Acquisition in Visual Impairments (3). Prerequisite: EVI 5316. This course focuses on the strategies teachers of students use to identify appropriate reading medium and teach literacy skills to students with visual impairments. The course addresses knowledge and skills in teaching braille reading and writing skills, using functional vision assessments in combination with learning media assessments, and supporting literacy learning of children with low vision who use print.

EVI 5315. Teaching Communication Skills to Visually Impaired Adults (3). This course has a threefold purpose. Students develop skills in reading, writing and teaching Braille to adults. Students learn adaptive techniques of communication in money management, handwriting, use of tape recorders, and management of print materials. The third area addressed in this course trains students to assess the communication needs of individuals with low vision, in order to work with them more effectively.

EVI 5316. Low Vision (3). Prerequisite: EVI 4121 or equivalent. This course prepares prospective teachers of students with low visual impairments, orientation and mobility specialists, and rehabilitation teachers for facilitating the visual functioning of individuals with low vision. Students learn the basics of optics and how to conduct functional vision evaluations, to modify environments, and to teach the effective use of low vision devices.

EVI 5317. Unified English Braille (3). The purpose of this course is to teach students preparing to be teachers of blind students (both adults and children) to read and write literary braille and to interline students' work carefully.

EVI 5318. Special Methods of Working with Preschoolers with Visual Impairments (3). Prerequisites: EVI 4011 and EVI 4121. In this course, participants develop the knowledge and skills necessary to effectively provide intervention services to the families of infants, toddlers and preschoolers with visual impairments. Activities center on conducting assessments, working with families, and designing and implementing interventions.

EVI 5319. Communication and Emergent Literacy for Young Children with Visual Impairments (3). Prerequisites: Instructor permission. This course offers the knowledge of communication and emergent literacy for young children (birth to age five) who are visually impaired or have other disabilities. The course prepares students to assess and plan for communication, language development, and literacy interventions for this age group.

EVI 5325. Technology for Individuals with Visual Impairment (3). This course is designed to acquaint students with a variety of electronic hardware and software alternatives that are utilized by individuals with visual impairments to access information in school, home and vocational environments. This course includes lecture, demonstration, peer-teaching and hands-on activities.

EVI 5326. Accessible Materials and Environment for Students with Visual Impairments (3). Prerequisites: EVI 5316 and EVI 5317. This course provides students preparing to become teachers of students with visual impairments with the specialized skills necessary to facilitate access to classroom activities and materials for learners who have visual impairments. Specific emphasis is placed on the compensatory skills domain of the Expanded Core Curriculum for Blind and Visually Impaired Youths (ECC), and how to acquire, adapt, and create accessible materials and environments for learners who have visual impairments.

EVI 5332. Social and Vocational Implications of Recreation and Leisure for Visually Impaired (3). This course is designed to demonstrate the physical, psychological, social, and vocational purposes of recreation and leisure activities within education and rehabilitation programs for persons with visual impairments.

EVI 5346. Aging and Vision Loss (3). Prerequisite: Instructor permission. This course explores the physical and psychosocial issues encountered by aging adults with severe vision impairment and examines strategies for living with a visual impairment in a changing/aging body in a world designed for sighted and younger people. The course incorporates fundamental principles of gerontology, health, and rehabilitation of the older adult with issues related to visual impairment. In addition, each student is asked to enhance his or her knowledge, attitudes, and perceptions about vision loss and aging people with visual impairments.

EVI 5355. Issues of Blindness in Society (3). This course examines the many issues related to being blind in a society predicated on the presumption that people can use vision to manage societal demands. The losses unique to visual impairment are explored and students are provided instructional strategies to assist individuals in living with visual impairment in a world designed for sighted people.

EVI 5367. Characteristics and Causes of Visual Impairment (3). This course introduces prospective teachers of students with visual impairments, orientation and mobility specialists, and vision rehabilitation therapists to the anatomy and physiology of the human eye, the visual mechanism, its embryologic development, and various eye pathologies. Emphasis is placed on the impact of these eye pathologies on the visual functioning of the individual.

EVI 5271. Foundations of Teaching Students Who Have Visual Impairments (4). This course provides teachers who are certified in other subject areas with an introduction to the specialized skill set necessary when planning and/or delivering effective instruction to students with visual impairments in grades PK-12.

EVI 5931r. Seminar in Visual Disabilities (3). This seminar covers current topics in the field of visual disabilities. May be repeated to a maximum of six semester hours.

EVI 5935. Studies in Research on Individuals with Visual Impairment (3). This course is designed to familiarize students with the published literature related to providing services to individuals with visual impairments and to furnish students with a basic knowledge of the purposes of research in this field, common design strategies, research and analysis tools used, and methods for analyzing the quality of published research.

EVI 5942. Student Teaching in Visual Disabilities (12). Prerequisite: EVI 4230 or equivalent. In this course, student teachers teach students with visual disabilities for one semester within a public school or residential school setting, full-time and under supervision of an experienced and certified teacher of students with visual impairments.

EVI 5943. Practicum in Orientation and Mobility (2). Prerequisites: EVI 4220 and EVI 5222. This course provides students in the program of Orientation and Mobility with fieldwork experience observing and teaching students/clients with visual disabilities. Practicum students are exposed to a wide range of teaching experiences under the direct supervision of an experienced O & M instructor. To facilitate the learning process, the student is provided an opportunity to observe and teach in different areas, including a variety of simple as well as advanced O & M skills, with a variety of students/clients.

EVI 5944. Practicum with Students Who are Deaf-Blind (1-3). Prerequisite: EVI 5131. This course provides participants with experiences with learners identified as having dual sensory disabilities or deafblindness. The practicum provides experiences in developing, implementing and evaluating individualized educational programs, as well as experiences working with a team of professionals, paraprofessionals and family members/guardians. May be repeated to a maximum of three semester hours.

EVI 5945r. Internship in Orientation and Mobility (3-12). (S/U grade only). Prerequisites: EVI 4220, EVI 5221, EVI 5222, and EVI 5943. In this course, student instructors teach orientation and mobility skills in public school, residential school, and rehabilitation settings for a minimum of 300 service hours to students with visual disabilities. They do so full-time and while under the supervision of an experienced, certified orientation and mobility specialist.

EVI 5946r. Internship in Rehabilitation Teaching of Adults with Visual Disabilities (3). (S/U grade only). Prerequisites: EVI 5019 and EVI 5255. In this course, interns teach rehabilitation skills within a federal, state, or private not-for-profit agency to adults with visual disabilities. They do so under the supervision of an experienced, Certified Vision Rehabilitation Therapist (CVRT).

Other Courses – School of Teacher Education

Definition of Prefixes

EDF—Education: Foundations and Policy Studies

EDG—Education: General

IDS—Interdisciplinary Studies

SMT—Science or Mathematics Teaching

Graduate Courses

EDF 5498. Single Case Design Research for Educators (3). Prerequisite: EDF 5481 or equivalent. This course prepares students for conducting teacher action research using single case research designs (SCRD) in educational settings. Salient features of SCRd and the advantages and disadvantages of this research methodology are discussed. Students build competence in creating and analyzing high quality single case design studies to investigate the effectiveness of instructional interventions.

EDF 5887. Multicultural Education (3). Prerequisite: Graduate standing. This course offers an introduction to the history and philosophy of educational policies and practices that respond to the realities of cultural diversity in the United States and abroad.

EDG 5073. Foundations of Blended and Online Learning and Teaching K-12 (3). This course aims to provide instruction to the field of blended and online learning and teaching in K-12 environments through presenting a glossary of fundamental terms, key concepts, and best practices based on national standards for development of online teachers and teaching. Learners explore e-learning, theories, tools, advantages and disadvantages of blended and online learning, and critical success factors for effective implementation of the practices. They practice beginning to incorporate what they are learning and applying it to their own instruction.

EDG 5074. Pedagogy of Blended and Online Learning and Teaching K-12 (3). This course contributes to and improves the skills of K-12 teachers, school leaders, and other educational personnel to successfully incorporate blended instruction in their classrooms, as well as those who teach in online environments. The course introduces the concept of digital pedagogy—art, craft, principles, and methods of instruction in blended and online K-12 learning environments to engage modern learners and provide the best learning experiences for diverse students.

EDG 5075. Technologies for Blended and Online Learning and Teaching K-12 (3). Prerequisite: EDG 5073 or EDG 5074. This course offers opportunities for participants to explore technologies, strategies, and tools to enhance learning, teaching, assessment, and communication in blended and online learning environments in K-12 schools. It is guided by National Standards for Quality Online Teaching (NACOL, 2010), National Educational Technology Plan 2010, and other national standards. Participants learn and practice effective e-learning techniques and technologies appropriate for various ages, learner characteristics, and content areas, as well as focus assignments on their own areas of teaching interest and expertise.

EDG 5076. Issues, Trends, and Practices in Blended and Online Learning and Teaching K-12 (3). Prerequisites: EDG 5073, EDG 5074, and EDG 5075. This course offers opportunities for participants to use their skills and knowledge for K-12 learners in blended and online environments and demonstrate their practical application for design, development, and delivery of their blended or online course to their classmates, by using various technologies and principles of digital pedagogy. Students also explore, analyze, and reflect upon the latest national and international trends related to developing online initiatives.

EDG 5206. Teachers and Curriculum Development (3). This course explores the challenges of curricular design from the institutional role of the teacher and analyzes how a teacher can become an effective contributor in curricular deliberation within the settings of schools and school districts.

EDG 5208. Foundations of Teaching (3). This course is for master's students seeking alternative or regular certification who do not have an undergraduate degree in a teaching field. This course provides the essential elements needed to succeed in a classroom.

EDG 5339. Making Sense of Data to Inform Instruction (3). This course is designed to support educators in exploring the concepts underlying the use of data to inform instructional strategies. The course provides an understanding of accountability systems and the wide range of data collection tools, and supports the development of educators' skills in basic data analysis procedures, data interpretation, and application of these interpretations to shape instructional practice in classrooms and other educational settings.

EDG 5342. Analyzing and Refining Teaching (3). Prerequisites: EDG 5209, EDG 5339, EDG 5345, EDG 5709, and EME 5050. This course assists teachers in identifying their own theoretical framework for instruction and using this framework to closely examine their own practice through the use of data collected from that practice. The course is designed to support teachers' synthesis of the theories, techniques, technology, and approaches introduced throughout the program into a coherent theoretical framework to be used to refine teachers' instructional practice.

EDG 5345. Using Assessments in the PK-12 Classroom to Differentiate Instruction (3). The course explores the wide range of formats (e.g., diagnostic, formative, and summative) of useful classroom assessments utilized across a variety of academic disciplines, grade levels, and student abilities. Focus is on how these assessment tools can inform learners' cognitive resources and instructional practices that can be used to differentiate instruction.

EDG 5365. Practitioner Research in Schools and the Community (3). This course introduces participants to teacher action research to enable them to design and conduct research focused on their own practice. Students learn to analyze and critique research related to applied educational studies conducted in school and community settings.

EDG 5709. Culturally Responsive Teaching for Equitable Instruction (3). This course addresses culturally responsive teaching and how it can be used to improve the academic performance of culturally and linguistically diverse learners including those living in poverty as well as those with differing family structures.

EDG 5972r. Capstone Defense (0). (S/U grade only.) In this course, students examine and reflect upon the knowledge, abilities, and educational effectiveness through data collected from their practice and the subsequent interpretations and applications using the theoretical and methodological tools introduced in the program. Through their portfolio, students are provided the opportunity to synthesize and reflect upon their experiences.

EDG 6008. Academic and Professional Identity (1). (S/U grade only.) This course examines current issues related to the acculturation of doctoral students and the formation of their academic and professional identities. For doctoral students, their 'academic' professional identity is situated within the higher education academic community and plays an integral role in their well-being and productivity.

EDG 6015. Grant Writing for Educational Research (3). This course provides participants with the knowledge and skills to prepare competitive education-related grant applications to government and private sources.

EDG 6221. Curricular Theory (3). This course focuses on theoretical concepts underlying significant curricular developments past and present; model development in curricular theory.

EDG 6369. Critiquing Educational Research (1). (S/U grade only.) This course provides participants with the knowledge and skills to critique and synthesize empirical research relative to teacher education and student learning. Standards developed by education professional organizations and governmental entities will be utilized.

EDG 6950. Writing for Publication (3). This doctoral-level course provides students with the knowledge and skills to further develop their academic writing ability. Course topics include practical considerations for scholarly writing, tools for productive writing, and constructing a cogent argument. Students are asked to track their daily writing and share drafts of their writing with peers for ongoing feedback.

EDG 6964r. Doctoral Diagnostic Examination (0). (P/F grade only.) This diagnostic examination is taken after a doctoral student has completed or is in the process of completing eighteen credit hours of coursework. The exam is an assessment used to appraise the student's research aptitude and readiness to continue pursuing a doctoral degree.

IDS 5348. Family-Centered Early Intervention (3). This course provides participants with the skills to collaboratively develop, implement, and assess family-centered early intervention services that are provided within natural environments. Emphasis is placed on providing developmentally appropriate, evidence-based intervention for infants and toddlers with disabilities, developmental delays, or risk conditions within the context of their families.

IDS 5349. Infant/Toddler and Family Assessment (3). This course provides participants with knowledge of the processes of assessing infant and toddler development and family functioning in order to develop meaningful intervention programs within natural environments.

SMT 5305. Classroom Interactions (3). This course is centered around a close examination of the interplay between teachers, students, and content, and how such interactions enable students to develop deep conceptual understanding in science and mathematics.

Note: Courses are subject to modification.

School of THEATRE Graduate Programs

COLLEGE OF FINE ARTS

Website: <http://theatre.fsu.edu/>

Chair: Bradley Brock, Interim; **Professors:** Bourus, Chappell, Dahl, Jordan, Muscha; **Associate Professors:** Coleman, Cooper, Gelabert, Hale, Lickson, Malaev-Babel, Osborne, Ossowski, Salata, West; **Assistant Professors:** Arespachoga, Lile, Rhine, Thomas; **Faculty Administrator:** Leaming; **Specialized Faculty:** Delorey, Eginton, Jackson, Riker; **Burt Reynolds Eminent Scholar Chair in Theatre:** TBA; **Hoffman Eminent Scholar Chair in Theatre:** TBA; **Professor Emeritus:** Fallon

The School of Theatre is one of the largest and most comprehensive theatre-training programs in the United States. The first program in Florida to hold such distinction, the school is accredited by the National Association of Schools of Theatre and is a founding member of the University/Resident Theatre Association. At Florida State University, actors, directors, designers, technicians, managers, teachers, and scholars learn by working with gifted faculty in a professionally oriented school environment. In realizing its educational mission, the school contributes to the cultural life of the University, the Tallahassee and Sarasota communities, and the state by creating an array of productions reflecting the full range of dramatic literature. From Shakespeare to Chekhov to Rogers and Hammerstein to world premieres, performances give audiences and participating students the opportunity to share the unique experience of the living theatrical event. Classroom experiences are enriched by the challenge of faculty, students, and visiting artists working side-by-side to create fine theatre.

The School of Theatre's graduate **FSU/Asolo Conservatory for Actor Training** is located in Sarasota at the Florida State University Center for the Performing Arts. This exemplary Master of Fine Arts (MFA) program in acting is operated in conjunction with the Asolo Theatre Company, a LORT professional theatre. The conservatory and the Asolo Theatre Company are both housed in a beautiful facility, which features a 500-seat proscenium theatre, a 160-seat proscenium theatre, dance studios, classrooms, and rehearsal spaces.

In addition to its degree programs, the School of Theatre has created the Theatre Academy of London, an extraordinary, year-round curriculum in London for select theatre majors. The emphasis of the program is on classical theatre training and includes theatre-going, backstage tours, classes with leading theatre artists, special internships, and performance opportunities. Students earn a full semester of academic credit while participating in a program that will make a real difference in their lives as students, artists, and human beings. Graduate credit is available by special request.

Degrees Offered

The Master of Arts/Master of Science (MA/MS) degrees offer a blend of academic courses and production training on an advanced level. The Master of Fine Arts (MFA) degree provides training to achieve professional-level competencies in acting, directing, costume design, technical production, or theatre management. The Doctor of Philosophy (PhD) in theatre is a research degree that indicates the perfection of individual skills in theatre scholarship, production, and education.

The School of Theatre is a fully accredited member of the National Association of Schools of Theatre, and its degree requirements are in accordance with the latest published regulations of that association.

Retention Standards

The School of Theatre reserves the right to refuse admission or terminate enrollment at any time if a student fails to maintain the standards of the program.

Facilities

There are six performance spaces available for the production of plays. All include rehearsal space. They are: the Mainstage Theatre in the Fine Arts Building in Tallahassee, the Augusta Conradi Studio Theatre in the Williams Building in Tallahassee, The Lab Theatre in Tallahassee, the Fine Arts Annex Theatre in the Fine Arts Annex in Tallahassee, and Mertz and Cook Theatres in the Florida State University Center for the Performing Arts and FSU/Asolo Conservatory Theatre in Sarasota, Florida.

The **Mainstage Theatre** in the Fine Arts Building is a proscenium theatre with continental seating for 500 patrons. Stage equipment includes a turntable, a counterweight system, hydraulic orchestra pit, a computer lightboard, a four-channel sound system, light and sound shops, two large-group dressing rooms, and two private dressing rooms.

The Studio, or Augusta Conradi Theatre, is a proscenium house and seats 183 patrons. The stage equipment includes a rope system, a preset lightboard, a single channel sound system, a light and sound control booth, green room, two group dressing rooms, and a small scene shop. The auditorium is used as a lecture classroom and demonstration laboratory by the School of Theatre.

The Lab is located at *502 South Copeland Street*. The Lab is flexible theatre space used in proscenium, thrust, arena, and open configurations. There is a variable seating capacity depending on each production's staging requirements. There is a lighting grid, and portable sound and lighting equipment is utilized. Subscription-season productions are mounted in the Lab Theatre each year. In addition, the space is used for student development and productions. There is an accompanying rehearsal hall next door.

The Fine Arts Annex Theatre, located at *117 Fine Arts Annex*, is a small proscenium space with flexible seating. The room is used as a classroom space, rehearsal space, and as a performance space for student productions.

Master of Arts/Master of Science

The Master of Arts/Master of Science (MA/MS) program in theatre at Florida State University offers students the opportunity to work with outstanding faculty in a flexible curriculum that combines scholarship and production work. Classes at the graduate level are small, enabling students to have direct contact with professors, contribute extensively in discussion, and do significant projects, reports, and papers.

The MA/MS program has been designed for both students who desire a foundation for the PhD, and are interested in teaching at the secondary school or junior college level, or for those students desiring a general graduate theatre education but are uncertain about pursuing the MFA or the PhD.

The MA is recommended for students who may wish to pursue a PhD, while the MS program is intended for the working theatre educator. The MA provides the option of writing a thesis, and has a foreign language requirement.

In addition, the MS for Theatre Educators is a three-summer program designed with working theatre educators in mind. Students enrolled in this program take coursework in performance, technical theatre, design, literature, and history.

Admission

Admission to the MA/MS program in the School of Theatre is based upon the following criteria: undergraduate GPA, Graduate Record Examination (GRE) scores, three letters of recommendation, a scholarly writing sample, and a statement of purpose. Any exemption from these requirements must be requested in writing from the Director of Graduate Theatre Studies and the Associate Dean for Academic and Students Services of the School of Theatre.

Master of Fine Arts

The Master of Fine Arts (MFA) degree is a course of study leading to a terminal artistic degree in theatre arts. The objective of the program is to provide students with competencies appropriate to the needs of professional theatres in America; only secondarily does this program prepare teachers. The goals of the program are to 1) ensure opportunities for mastering the application of theory and skills by practicing a professional specialization; 2) encourage on-the-job training in actual working conditions; and, 3) provide a general background in theatre history and practice.

Admission

Students admitted to an MFA program must meet the University admission policies for graduate studies, must have a baccalaureate degree in theatre or its equivalent from an accredited institution, and must offer evidence of a high degree of creative ability in their area of specialization.

Residency

A student must be enrolled full-time in graduate study for a minimum of four semesters. A minimum of sixty semester hours beyond the baccalaureate degree is required for completion of the MFA degree. However, there are no maximum limits to the time required. It is considered normal to take three school years to complete the program because of the time necessary for information, insights, and crafts to become integrated sufficiently into a student's practice to demonstrate mastery and maturity in artistry and skill.

Practicum Program

The unique feature of the course of study toward the MFA at Florida State University is the practicum program. Practicum acknowledges the legitimacy of unique artistic production-oriented work not affiliated with classroom coursework. The practicum program allows students and their advisors to plan and execute an individualized track to meet students' particular needs

and desires. The specific content of each practicum is determined in advance and entered on the student's progress check list. This contractual agreement is evaluated by the MFA faculty each semester.

Review

A faculty committee meets with each student every regular semester to evaluate the student's progress. Individual program advisors report on their students in terms of attitude, class work, production assignments, projects, artistic growth, conduct, and professional potential. Any faculty members who have worked with MFA students may submit relevant information. The results of the review are part of the student's file.

Internship

Internships provide students with the opportunity to gain experience in their particular field by working under the supervision of recognized professionals. Resident internships must be arranged with the student's program director. The student is responsible for providing progress reports and a full evaluation from the internship supervisor before grades can be assigned. Internships may be arranged to a maximum of thirty semester hours.

Specialization in Acting

The MFA acting program is located in Sarasota at the FSU/Asolo Conservatory for Professional Actor Training in conjunction with the Asolo Repertory Theatre Company. Students are offered a conservatory approach which emphasizes the acquisition of skills appropriate to repertory ensemble. The three-year curriculum includes daily intensive training in voice, speech, dialects, movement, and dance, as well as scene study, text analysis, and period styles. Upon graduation and at any time within the following five years, all MFAs are eligible for membership in the Actor's Equity Association.

Specialization in Directing

The mission of the program is to provide students with training in the process and practice of directing. The program is designed to give students the skills they will need to continue their own development and growth as directors in professional theatre. The curriculum provides a careful balance of academic classes, studio work, and production experience.

Specialization in Costume Design

The mission of the program is to provide students with training in the process and practice of costume design. The program is designed to give students skills needed to continue their own growth as costume designers in American theatre. Students graduate with an in-depth knowledge of all aspects of costume design for the stage. Design work in opera, dance, and film is also explored. Costume technology is stressed as well, including skills in millinery, fabric modification, costume crafts, and patterning. Each MFA costume design student will design from three to six productions. Design work in dance and film is also available on occasion. Opportunities to teach are also available.

Specialization in Technical Production

The mission of the technical production program is to train students in the process and practice of technical design, technical management, and production management. The program is designed to provide new and strengthen existing skills and aid the student's growth as a technical director or production manager in professional or educational theatre. Organization and management and technical skills such as rigging, welding, hydraulics, pneumatics, advanced woodworking, and motion control will be covered in detail. Structural analysis and design for the stage is emphasized. Each MFA technical production candidate will have technical direction or assistant technical direction responsibilities for at least three productions. Teaching opportunities also are available.

Specialization in Theatre Management

The mission of the theatre management program is to help enhance the professional management of theatre and arts organizations in America by developing future theatre managers. Students are provided with practical training and hands-on experience in the process and practice of managing theatre and arts organizations. Our goal is to give students an in-depth knowledge of all aspects of producing theatre, as well as an understanding of management principles, personnel, finance, marketing and fundraising management, and working knowledge of computer applications in arts management.

Doctor of Philosophy (PhD)

The PhD is a generalist program in theatre studies with opportunities for specialization. A rigorous course of study, the PhD program operates within an active performance-oriented school, nationally recognized as one of the leading theatre-training schools.

There are three types of requirements for the doctoral degree:

- Formal coursework
- Comprehensive examinations
- Dissertation

The doctoral degree in theatre studies prepares students to become:

- Scholars in theatre history, criticism, literature, and theory
- Dramaturgs in a professional or academic environment
- Publishable critical writers
- Experienced teachers on a university level

Classes at the doctoral level are small and intensive, enabling doctoral student to have close interaction with the faculty. Doctoral students also contribute extensively to the intellectual environment of the program and the School of Theatre as teaching or research assistants.

Requirements

The doctoral program normally requires at least four years of full-time study beyond the master's degree, two years of coursework, a year for comprehensive exams and dissertation prospectus writing, and at least a year for the dissertation. At least one year must be spent in full-time residence (defined as twenty-four semester hours within any twelve-month period once a student has reached thirty graduate semester hours or a master's degree.)

The doctoral curriculum requires seventy semester hours beyond the master's degree (forty-six semester hours of coursework and at least twenty-four dissertation hours). For students on assistantship, nine hours per semester constitutes a full-time load. Students who are not funded and those on fellowship must register for twelve hours per semester.

Admissions

Admission to the doctoral program is based on Graduate Record Examinations (GRE) scores, academic record, professional background, statement of purpose, letters of recommendation, and a critical-scholarly writing sample. The highest-rated applicants are often interviewed in person or by telephone. The faculty then determines whether an applicant can be admitted, placed on a waiting list, or declined.

Definition of Prefixes

THE—Theatre Studies and General Resources

TPA—Theatre Production and Administration

TPP—Theatre Performance and Performance Training

Graduate Courses

THE 5065. Disability and Representation (3). This course comprises an advanced introduction that surveys how the arts and popular culture (including literature, fine arts, performance, advertising, documentary film, and video) have both reflected and contributed to attitudes and public policy concerning people with disabilities. The course takes a disability-studies approach, which considers the social and cultural aspects of disability.

THE 5084r. Theatre Problems (3). In this course, topics change each semester depending upon instructor. May be repeated to a maximum of six semester hours.

THE 5120. Advanced Theatre History I: Classical and Medieval (3). This course examines the origins of theatre: Classical Greece and Rome; Japanese Kabuki/Noh/Bunraku; Medieval Europe.

THE 5130. Advanced Theatre History II: Renaissance and 18th Century (3). In this course, topics include Neoclassicism, Elizabethan/Jacobean, Spanish Gold Age, Restoration, Decline of Neoclassicism, and Germany.

THE 5160. Advanced Theatre History III: 19th and 20th Centuries (3). In this course, topics include Romanticism, Realism, Modernism, Postmodernism, and Postcolonialism.

THE 5238. History of African-American Drama (3). This course is a survey of the history of African-Americans in the American theatre from the African Grove Theatre to the present, and of playwrights from William Wells Brown to August Wilson.

THE 5246. Musical Theatre History I (3). This course traces the development of the musical from its European origins to 1943. Students establish familiarity with a wide range of the repertoire of the earlier musical theatre.

THE 5247. Musical Theatre History II (3). This course focuses on the development of the American musical, in its cultural, theatrical and social context, from 1943 to the present. The course also explores the elements of musical theatre and the various ways these elements are used in different types of musicals.

THE 5265r. Historic Costume II (3). Prerequisite: THE 4260. This course is an advanced study of selected periods of costume history and its relationship to the theatrical costume. The time periods covered include both western and nonwestern dress. May be repeated to a maximum of six semester hours.

THE 5273r. Seminar: Selected Topics in History of Performance [Acting and Directing] (3). Prerequisite: Two undergraduate theatre history courses or instructor permission. This course focuses on selected topics in the history of acting and directing from the ancient Greeks to the present day. The course also includes investigation resulting in some form of report. May be repeated once for credit as content varies to a maximum of six semester hours.

THE 5274. Seminar in History of Stage Directing (3). Prerequisite: Instructor permission. This course investigates the phenomenon of the stage director in its historical context focusing on key figures and productions.

THE 5302. Contemporary U.S. Theatre (3). Prerequisites: THE 3213 and THE 4304. This course focuses on contemporary U.S. theatre and performance, including traditional theatre and experimental types of performance. Students read, analyze, and research theatre in the canon and outside of it. The course culminates in an original performance.

THE 5317r. Seminar: Selected Topics in Dramatic Literature and Dramatic Theory (3). Prerequisite: Two undergraduate theatre history courses or instructor permission. This course focuses on selected topics relating to dramatic literature and theatrical theory for intensive investigation resulting in some form of report. May be repeated once for credit as content varies to a maximum of six semester hours.

THE 5437. Gender, Race, and Performance (3). This course is an advanced introduction to the contemporary theories and practices regarding the performances of race and gender upon the stage and in everyday life. The course also utilizes feminist theories of performance, students read playtext written by women of color, by white women, and by one African-American male.

THE 5439. African Theatre and Performance (3). This course examines the cultural and political complexities of selected countries of sub-Saharan Africa through an exploration of pre-colonial performance traditions, written plays, and contemporary popular culture.

THE 5486. Graduate Dramaturgy (3). This course is an introduction to the principles of dramaturgy, including preparation of a dramaturgical protocol, preparation of scripts for production, and research into background, biography and thematic issues of a play script.

THE 5765. Performance I for Theatre Educators (3). This course instructs secondary education faculty in the crafts of acting and directing through a variety of practical exercises. At completion, students should be able to demonstrate the skills and abilities to guide their own students in the basics of acting and directing.

THE 5770. Theatre History and Literature I for Theatre Educators (3). This course explores the staging practices and dramatic literature of classical Greece and Rome, medieval Europe, the Renaissance, 18th-century Europe, and classical Japan. The course emphasizes the realization of the plays in performance in both historical and modern contexts.

THE 5771. Theatre History and Literature II for Theatre Educators (3). This course explores the staging practices and dramatic literature from the 18th-century to the present. Specific units include romanticism, melodrama and popular culture, the rise of realism, avant-garde theatre movements, the musical, European and American innovations 1960s–1990s, and contemporary dramatic theory.

THE 5772. Theatre History and Literature III for Theatre Educators (3). This course works to familiarize the students with a wide range of contemporary plays and situate the plays in the sociopolitical contexts in which they were produced. Although plays from various world cultures are read, the course emphasizes multicultural dramatic literature of the United States.

THE 5905r. Directed Individual Study (1–3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

THE 5910. Theatre Bibliography and Research (3). This basic graduate course introduces students to library resources, methods, and the reporting of research in theatre.

THE 5916r. Supervised Research (1–5). (S/U grade only). May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

THE 5918r. Theatre Tutorial (1–3). (S/U grade only). Prerequisite: Graduate students in theatre only. This course consists of selected topics in theatre. May be repeated to a maximum of six semester hours.

THE 5925r. Writing Workshop (1–3). (S/U grade only). This course is intended for graduate students to analyze and critique papers for publication and conference presentations. May be repeated to a maximum of twelve semester hours.

THE 5940r. Internship in Theatre (2–12). (S/U grade only). Prerequisite: Consent of appropriate committee. This course consists of a resident internship in an approved professional theatre shop or enrichment center. May be repeated to a maximum of twelve semester hours.

THE 5971r. Thesis (3–6). (S/U grade only). A minimum of six semester hours required.

THE 5973r. Creative Thesis (3–6). (S/U grade only). May be repeated to a maximum of nine semester hours. A minimum of six semester hours is required. MFA candidates only.

THE 6531. Methods of Theatre Criticism (3). This course is a study of major genres of theatrical criticism with focus on twentieth-century movements. The seminar is designed to aid not only dissertation analyses but also performance criticism and production work.

THE 6980r. Dissertation (1–12). (S/U grade only.)

THE 8963r. MFA Qualifying Examination (0). (P/F grade only.) This course is to be taken within the first five semesters of residency and shows that the student is qualified to continue the program successfully. The course form varies with discipline and skills being demonstrated. May be repeated with consent of program director.

THE 8964r. Preliminary Doctoral Exam (0). (P/F grade only.) This course is to be taken after the student has registered for or already taken a minimum of forty-eight hours.

THE 8966r. Master's Comprehensive Examination (0). (P/F grade only.) This course is normally taken the last semester of coursework.

THE 8976r. Thesis Defense (0). (P/F grade only.)

THE 8978. Defense MFA Degree (0). (P/F grade only.) The form of this course varies and may include portfolio review or vita presentation. The course is to be taken during one of the last two semesters of residency.

THE 8985r. Dissertation Defense (0). (P/F grade only.) This course is taken on completion of dissertation and within five years of passing preliminary examinations.

TPA 5009r. Media Design (3). This course is an exploration and practice of advanced/specialized techniques and methods of designing for the stage.

TPA 5015. Stage Machinery Design and Construction (3). This course is a skills-development course covering the process of designing and building mechanical effects for the stage. Areas to be studied include basic physics, hydraulics and pneumatics, electro-mechanics, and control systems, as well as a systematic approach to machinery design. This study leads to the public presentation of a fully realized, practical final project.

TPA 5016. Model Making (3). This course acquaints students with current model building techniques and systems. Students gain experience in constructing most of the elements commonly associated with models such as doors, windows, textures, fences, trees, and props.

TPA 5025. Lighting Design I (3). This course acquaints students with the design process and the various tools by which lighting designers research and express their art. The course includes script analysis, producing light plots, and basic drafting.

TPA 5026. Lighting Design II (3). This course is an overview of the lighting design process for a variety of spaces from concept to finished product. Emphasis is on script analysis. Content includes instruction in the creation and use of paperwork, as well as practical aspects of lighting for both proscenium and non-proscenium venues.

TPA 5027. Lighting Design III (3). This course encompasses lighting design for a variety of production styles such as musicals, opera, dance, comedy and tragedy.

TPA 5028. Lighting Design IV (3). This course consists of intensive study in research, process, script interpretation and design presentation. Emphasis is placed on problem solving and professional conduct.

TPA 5029. Lighting Design V (3). This course centers on non-theatrical lighting, including tours, industrials and architectural, as well as cross-over areas of projection, sound and video. Emphasis is on how the implementation of this technology affects design approaches.

TPA 5042r. Advanced Costume Design for the Stage (3). This course is an advanced exploration into the costume design process for the theatre, including researching, script analysis, design problems, and the costume designer's role throughout the production process. May be repeated once when content varies to a maximum of six semester hours.

TPA 5047. Advanced Costume Rendering (3). Prerequisites: TPA 4040 and TPA 4071. This course is an advanced exploration and analysis of the skills needed in rendering, with a specific focus on costume rendering techniques. The course also discusses the figure, fabric textures, drapery of clothing, garment characteristics and period styles.

TPA 5062. Scene Design: Theory and Practice (3). Prerequisite: Instructor permission. This course includes advanced projects; emphasis on multiple scene productions, model building, rendering, and working drawings; execution of complex productions such as musicals and opera.

TPA 5065. Principles of Scene Design (3). The course explores the techniques and processes of design for the theatre. This includes the development of a dramatic concept, groundplan and final drawings.

TPA 5079. Scene Painting (3). This course investigates the principles and techniques of traditional two-dimensional scenic art.

TPA 5080r. MFA Practicum in Design for the Stage (2–15). Prerequisite: Instructor permission. In this course emphasis is on scenic, costume, and lighting design for the stage. May be repeated to a maximum of sixty semester hours.

TPA 5089. Selected Topics in Advanced Technical Theatre (3). Prerequisite: Instructor permission. This course studies topics such as painting scenery for the stage, handling of various paint media, effects of lighting on colors. The course involves intensive study of master draftsmen and artists and ways of imitating artistic styles on stage.

TPA 5098. Theatrical Design for Theatre Educators (3). This course is a study of the principles and elements of design and how they are applied to scenery, costume and lighting design.

TPA 5207. Technical Direction (3). This seminar addresses the technical management techniques and graphic presentation skills required of the technical director in a variety of situations.

TPA 5213. Stage Rigging (3). This studio course introduces the equipment, materials, and the standard professional techniques required for safe and efficient stage rigging utilizing both hemp and counterweight rigging systems.

TPA 5235r. Selected Topics in Stage Costuming and Make-Up Technology (3). Prerequisites: THE 4260; TPA 3230C, and TPA 3248, or instructor permission. This course is an in-depth exploration and practice of techniques and methods of construction and execution of solutions to advanced problems in costuming and make-up technology. May be repeated once with new content to a maximum of six semester hours.

TPA 5236. Advanced Costume Crafts (3). This course offers a further exploration of various advanced costume craft techniques and materials. Topics include mechanical moveable parts, electrical lightpacks, and fog packs. Each class research project must address the proper fit, comfort, movement, weight, and sight considerations needed for successful theatrical craft apparel.

TPA 5237r. Selected Topics in Costume Design for the Stage (3). Prerequisite: TPA 4040 or instructor permission. This course explores the conventions, practices, techniques, and aesthetics of designing for stage productions with lectures, discussion, and execution of designs. May be repeated once with new content to a maximum of six semester hours.

TPA 5242. Advanced Stage Costume Millinery Techniques (3). This course is an advanced exploration of various millinery techniques. The course includes the blocked, constructed buckram, straw, and wire frame headdress, with a special emphasis on millinery patterning from both renderings and historical research.

TPA 5243. Advanced Period Draping and Fitting Techniques (3). Prerequisites: TPA 5287 and THE 5265 or instructor permission. This course includes advanced practice in costume patterning for theatre with an emphasis on draping and drafting historically based garments for women and men. Projects include period garment research and measuring, sizing, fitting and grading techniques to accommodate actual performers' measurements and stage movement requirements.

TPA 5245. Fabric Modification for Stage Costume (3). This course focuses on advanced techniques of two-and-three-dimensional fabric modification techniques as they relate to theatrical costumes. Techniques covered include dyes, painting mediums, printing processes (including airbrush and silkscreen), sewing and off-loom techniques.

TPA 5247. Advanced Stage Wigs and Specialty Makeup (3). This course is an advanced study examining makeup, hair and wig styles in various historical periods and cultures. Students acquire practical experience in constructing and styling wigs for the stage and in designing various period hair and makeup styles. Projects reflect refinement of skills in wig making and styling techniques used in professional theatres.

TPA 5278. Electricity and Electronics for the Stage (3). This course explores the basics of electricity as it is used in the industry of live entertainment, including the usefulness, power, and hazards that this can present. The course encompasses more specific information and techniques pertaining to stage use of lighting, sound, projections, electronics, and motors.

TPA 5280r. MFA Practicum in Technical Theatre (2–15). Prerequisite: Instructor permission. This course gives students the opportunity to develop methods and skills consistent with professional practice in the execution of scenery and properties for theatre. May be repeated to a maximum of sixty semester hours.

TPA 5284. Technical Production (3). This course examines the production process from play selection through set design, set load in, run of show, load out, and post-modern analysis. Focus is on the various and linear aspects of production, including the management and planning of the budgeting, pre-construction, construction, run of show, and strike.

TPA 5285. Technical Production and Management (3). Prerequisite: TPA 5207 or instructor permission. This course provides students with more advanced knowledge and skills as a professional technical director. The course focuses on planning and management skills and topics include shop procedures, production and construction calendars, manpower, space usage, and establishing priorities.

TPA 5286r. Selected Topics in Technical Theatre (3). Prerequisite: Instructor permission. This course discusses the acquiring of skills necessary to solve problems in technical theatre production such as microcomputers, hydraulics, rigging, tool maintenance, welding, or plastics. May be repeated to a maximum of twenty-four semester hours.

TPA 5287. Advanced Costume Patterning (3). Prerequisite: TPA 4239 or instructor permission. This course enables students to develop skills consistent with professional methods of creating patterns for stage costumes for women and men, including measuring, sizing, and fitting on individual body shapes and sizes. Patterning methods include drafting, flat pattern and draping techniques used in creating historically based costumes.

TPA 5306. Structural Design for the Stage II (3). This course is a continuation of the concepts and material covered in TPA 5310 (Structural Design for the Stage I).

TPA 5310. Structural Design for the Stage I (3). This course helps students develop the skills and techniques necessary for the safe design and construction of stage scenery through the study and application of static engineering, physical science and material strength using pre-calculus mathematics.

TPA 5315. Physics of Stage Machinery (3). This course examines the fundamentals of physics and Newton's Laws as they relate to stage machinery. The course discusses the application of these dynamics for prediction and understanding of motion of stage wagons, turntables or lifts and emphasizes the practical use of motors, winches, turntables, lifts and other stage mechanisms.

TPA 5335. Costume Design for Dance (3). This course is an advanced exploration into the costume design process as it relates to different dance venues, including modern, ballet and music theatre. Rendering techniques and dance apparel are examined.

TPA 5336. Costume Design for Film and Television (3). This course concentrates on costume design for film and television. In the course, students generate designs for a variety of projects, research work of working film and television, and understand the costume design process for film, television and related fields.

TPA 5347. Software for Technical Theatre (3). This course covers the use of Microsoft Excel and AutoCad as a communication tool in theatre. No prior computer drafting is required. Experience in hand drafting is highly recommended. Throughout the class, a combination of paper and practical assignments is used.

TPA 5356. Computer Rendering for Costume Designers (3). Prerequisite: TPA 5047. This course explores various computer rendering techniques for the costume designer and enables the student to develop an understanding of computer presentation programs and digital portfolios.

TPA 5402. Business Communications in the Arts (3–12). This course explores the myriad ways in which leaders in the arts communicate through press writing, public relations, and business documentation for arts organizations. Topics include: writing, media relations, business proposals and responses, documentation for financial support, and controlling the public image.

TPA 5405. Principles of Theatre Management (3). This course provides students with an overview of the management concepts and practices of American theatre, especially as they apply to non-profit community and educational theatre organizations.

TPA 5408. Business and Legal Issues in the Arts (3). Prerequisite: TPA 4400 or instructor permission. This course provides an overview of what is required to start up and operate an arts organization, as well as developing skills in budgeting, forecasting, fiscal management, contract negotiating and working with unions, personnel management, policy development, board relations, and organizational leadership.

TPA 5409. Audience Development and Arts Marketing (3). Prerequisite: TPA 4400 or instructor permission. This course provides an overview of marketing and development for arts organizations. This course specifically develops skills in strategic marketing planning, budgeting, media planning, graphics and layout concepts, writing from a marketing and sales perspective and public relations.

TPA 5410. Strategic Governance in the Arts (3). This course looks at how boards of directors govern arts organizations and the operation of the dynamics between management and the boards. Topics include: strategic planning, Gantt charting, board/executive relationships, artistic leadership, incorporating, working with governmental agencies, touring, licensing, and scheduling.

TPA 5425. Fiscal Management and Economics in the Arts (3). This course offers introductory and advanced principles of fiscal management and economics for not-for-profit arts organizations. In-depth analysis covers areas such as microeconomics; advocacy for public support of the arts; understanding of finance, accounting and book-keeping terms and concepts; and financial statements.

TPA 5470r. MFA Practicum in Management (2–15). Prerequisite: Instructor permission. This course gives students the opportunity to experience the range of possibilities with the profession from box office and publicity to Fine Arts Council and foundation programs. May be repeated to a maximum of sixty semester hours.

TPA 5471. Leadership and Organizational Management in Arts (3). This course provides an overview of effective leadership practices in the arts. The course also allows students to attain knowledge and skills needed to manage complex organizations and to coordinate effectively and manage personnel in an arts organization.

TPA 5905r. Directed Individual Study (1–3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

TPA 5930r. Select Topics in Management (3). This course is designed to help the student develop a comprehensive understanding of skills and practices in different areas of theatre management and to develop research and presentation skills. May be repeated to a maximum of twelve semester hours.

TPA 5931r. Selected Topics in Stage Design (3). This course is an exploration and practice of advanced/specialized techniques and methods of designing for the stage.

TPA 5940r. MFA Internship in Technical Theatre, Stage Design, and Management (2–15). Prerequisites: Completion of sixty semester hours in regular MFA specialization and consent of appropriate committee. This course is a resident internship in an approved professional theatre, shop, or enrichment center. May be repeated to a maximum of thirty semester hours.

TPA 5941r. MFA Practicum in Costume Technology (1–6). Prerequisite: Instructor permission. This course allows students to develop skills consistent with professional practice in the execution of advanced costume technology projects, including but not limited to: interpreting costume designs for patterning and constructing period garments or costume crafts items, dyeing or painting and creating fabric modification techniques, constructing millinery, or styling, ventilating or constructing wigs or specialty makeup needs for the stage. May be repeated to a maximum of fifteen semester hours.

TPP 5145r. Acting Techniques I (3). This course is designed to provide actors with practical means of facilitating their creative process. The basic principles of organic inner technique are applied to improvisational exercises, character development and scene work. The higher spheres of the actor's creativity are approached via psycho-physical breath and imagination techniques. May be repeated to a maximum of six semester hours.

TPP 5146r. Classical Performance Styles (3–6). This course introduces the work of the classical actor. It includes development of imaginative and technical facilities as applied to ancient Greek repertory. The course ends with an introduction to Shakespeare. May be repeated to a maximum of nine semester hours.

TPP 5158. Performance II for Theatre Educators (3). This course expands development of theatrical exercises, scene study and rehearsal skills. Text is drawn from contemporary American plays.

TPP 5284r. MFA Practicum in Acting (1–15). Prerequisite: Instructor permission. This course involves conservatory study in professional actor training in conjunction with the Asolo State Theatre in Sarasota. May be repeated to a maximum of sixty semester hours.

TPP 5355. Performance III for Theatre Educators (3). This course allows the development and strengthening of directing skills for working theatre educators. Concentrated work in direction of scenes and monologues is used.

TPP 5380r. MFA Practicum in Directing (2–15). Prerequisite: Instructor permission. This course gives students an opportunity to work in production as stage manager, assistant director, and director of Studio Theatre and Mainstage productions. May be repeated to a maximum of sixty semester hours.

TPP 5381–5383. Problems in Directing (three hours each). Prerequisites: TPP 4310, TPP 4311; and/or instructor permission. These courses are advanced directing scene work for the specialist.

TPP 5405. Advanced Performance and Devised Theatre: Laboratory in Performance Creation (3). Prerequisite: TPP 3103 or TPP 4301. This advanced acting and directing course aims at performance creation in response to major works in world literature. Students learn various approaches to devising an autonomous work of theatre. Students invest much effort in rethinking conventional creative processes and production methods.

TPP 5515r. Movement I (3). This course explores and expands the actor's movement choices and his ability to express himself non-verbally; emphasis on developing a strong, expressive dramatic imagination. May be repeated to a maximum of six semester hours.

TPP 5516r. Movement II (3). This course emphasizes the creation of the physical characteristics of a role by combining first-year movement analysis with basic acting process. May be repeated to a maximum of six semester hours.

TPP 5651. Advanced Play Analysis (2). Prerequisite: TPP 5656 and instructor permission. This course is an in-depth analysis of representative play scripts to enable realization in production.

TPP 5656r. Advanced Play Analysis for Actors (3). This course is intended to provide actors with the tools for careful script analysis. Aristotelian, Elizabethan, Brechtian, and postmodern dramaturgical techniques are examined in order to identify methods for achieving a deep and objective reading of any given text. May be repeated to a maximum of four semester hours.

TPP 5715r. Voice I (3). This course delves fully into Fitzmaurice Voicework: de-structuring to release breath, creative impulses, and the voice; and restructuring which allows the actor to bring breath and impulse work skillfully onto the stage. The speech work for this class includes training of the articulators, speech production, IPA, and mastery of the standard American dialect. May be repeated to a maximum of six semester hours.

TPP 5716r. Voice II (3). This course concentrates on language structure analysis, scansion, and scoring a text. Dialect training (spoken and transcription) is studied with emphasis on the in-depth process of learning dialects. Advanced work on vocal production gives the actor a fully expressive, skillful vocal instrument on stage. May be repeated to a maximum of six semester hours.

TPP 5906r. Directed Individual Study (1–3). (S/U grade only). May be repeated to a maximum of twelve semester hours.

TPP 5940r. MFA Internship in Theatre Performance (2–15). (S/U grade only). Prerequisites: Completion of sixty hours in regular MFA specialization and consent of appropriate committee. This course is a resident internship in an approved professional theatre, shop, or enrichment center. May be repeated to a maximum of thirty semester hours.

THEATRE PERFORMANCE AND TRAINING:
see Theatre

THEATRE PRODUCTION AND ADMINISTRATION:
see Theatre

TOPOLOGY AND GEOMETRY:
see Mathematics

TRANSPORTATION AND TRAFFIC ENGINEERING:
see Civil and Environmental Engineering

TRANSPORTATION PLANNING:
see Urban and Regional Planning

Graduate Department of URBAN AND REGIONAL PLANNING

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Website: <http://www.coss.fsu.edu/durp/>

Chair: Jeff Brown; **Professors:** Brown, Chapin, Coutts, Doan; **Associate Professors:** Butler, Duncan; **Assistant Professors:** Holmes, Jackson, Fang, Kim; **Teaching Faculty:** Felkner; **Planner in Residence:** Smith; **Professors Emeriti:** Cowart, Deyle, Miles, RuBino, Thompson

The Field of Planning

The profession of Urban and Regional Planning encompasses all aspects of the development of human settlements, including the use of land, protection of the environment, economic productivity, and the future allocation of physical and social public resources. Planning's initial concern with the form and structure of cities continues, but it has grown to include all aspects of the formulation and implementation of public policy, at all levels of society. Today, the field is diverse and interdisciplinary, incorporating many issues developed over the past decades and expanding to include new areas of concern. This has resulted in the establishment of new priorities and the emergence of new policy directions, including environmental sustainability, social-ecological resilience, human service delivery systems, affordable housing, attention to job growth, global competitiveness, and access to health services, as well as more traditional activities such as the provision and financing of roads, infrastructure, and public services; urban design; guiding real estate development; and implementing public transportation systems.

As an institutional and professional activity, planning is now practiced in the public sector at all levels of government and in the private sector through firms that service local governments, development interests, and community groups. At each stage in the development of the profession new skills and knowledge have been called for, creating new employment opportunities and an expansion of the backgrounds held by professionals in the field. Today, planners have ties to the various social sciences, natural sciences, law, engineering, business, the design professions, and others. Consequently, majors from throughout the University have been attracted to the field and have thrived in a discipline that welcomes individuals with backgrounds in science, policy, design, and computer applications.

What unites persons from these various backgrounds into the professional field of planning is a commitment to making the world a better place through collaboration, consensus building, and enlightened and informed public policy. While both the problems and the means for dealing with them may differ, all planners are concerned with systematically studying problems and opportunities, assessing probable future directions, and formulating appropriate policies and programs to address them. Moreover, unlike many other problem-oriented professions, planning is distinguished by its concern with coordinated policy responses. Planners have adopted a broad view that focuses on the interrelationships between problems and the necessary interrelatedness of solutions.

Above all, planners are committed to a particular concern: improving the "quality of life" in the places they work. This extends to employment, schools, health, housing, community facilities, transportation systems, commercial and business development, parks and green space – everything to do with physical, social, and natural environments. While any single professional may focus on a narrower range of issues, the field as a whole focuses on the entire set of issues affecting the livability of the built and natural environment. Planners attempt to address these issues in ways that recognize the differing and legitimate concerns of many diverse and partisan interests. Accordingly, planning is a demanding and exciting field. It is beset by challenges that are created by the difficulties in finding solutions to thorny problems and in obtaining a consensus among diverse interests on policies and programs to address these problems. At the same time, it is a rewarding field. Planners know that they can and do make significant contributions to the well-being of their cities, states, and nations.

The Department of Urban and Regional Planning

The Department of Urban and Regional Planning was created in 1965 in response to both the growing national demand for persons trained in planning, urban affairs, and policy analysis, and the rapid population and economic growth occurring within the Sunbelt. Florida has been one of the fastest growing states in the nation. This growth has raised important issues about land development, housing, transportation and infrastructure, environmental protection, health care, and others, and the state has adopted a comprehensive series of laws that mandate planning at all levels of government. This has put Florida in the forefront of the national planning movement and has provided the Department with a strong, exciting, and supportive environment within which to offer a professional program.

The Department offers the following degree programs: Master of Science in Planning (MSP), Doctor of Philosophy (PhD), joint graduate pathways in planning and law (MSP/JD), planning and international affairs (MSP/MS or MA), planning and public administration (MSP/MPA), planning and demography (MSP/MSD), and planning and public health (MSP/MPH). Because of the breadth and diversity of the field, graduate study is considered essential for assuming professional positions and for advancing within the profession. The standard professional degree is the master's degree, and master's graduates in planning now hold the overwhelming majority of planning positions. The doctoral degree serves as preparation for academic, research, or high-level policy and administrative positions. The Joint Graduate Pathways prepare professionals to work in positions at the nexus of their component professions as they culminate in the acquisition of two degrees.

All of the programs respond to the educational challenge of recognizing the breadth and diversity of the field and, at the same time, providing students with training in the common aspects, concerns, and approaches of the field. They offer the student an opportunity to study the central core of knowledge that is common to all planning activities and to develop specialized knowledge in particular problem and issue areas. Graduates of the programs are equipped to function both in generalist and specialist roles and to adapt to new challenges as the nature of the issues and preferred policy responses change. The master's degree program is accredited by the Planning Accreditation Board.

Located in Florida's state capital, the Department offers students many opportunities to interact with the key executive, legislative, and judicial offices of the state. The Department maintains close ties with state, regional, and local planning agencies, the state legislature, and the governor's office. These agencies provide substantial support services to the Department in the form of internships and field placements, data and research reports, visiting lecturers and adjunct faculty, and permanent employment positions.

Students come from across the nation and from many foreign countries and U.S. territories. Women and persons of color are well represented in the program. Student backgrounds are highly diverse; many come from the social sciences, engineering, architecture and the design arts, social work, or the physical sciences. The program is able to accommodate students from a wide variety of disciplines that are relevant to the issues addressed by the planning field. The total number of graduate students in residence at any time varies between 100 and 120. With eleven permanent faculty, plus adjunct instructors, this produces a favorable faculty-student ratio. At the same time, the Department is sufficiently large to reflect the diversity of the field and to allow students the opportunity to study a number of different problem and policy areas.

More than 1,600 students have graduated from the Department's graduate programs. These graduates are now employed in forty-eight states and territories and twenty-seven foreign nations as professional staff in private consulting firms; for major developers; in law firms, universities, research organizations, business, and industry; and in local, state, regional, and national governments.

Master's Program

The principal aim of the master's program is to train students for professional careers in planning, allowing them to function in both generalist and specialist roles. The program consists of forty-eight credit hours of coursework organized into the following curriculum components:

- **Core curriculum:** fifteen credit hours
- **Methods for policy and planning decisions:** six credit hours
- **Collaborative and participatory methods:** three credit hours
- **Elected specialty area:** nine credit hours
- **Electives:** twelve to fifteen credit hours
- **Capstone requirement:** three to six credit hours

Core Curriculum

- URP 5101 Planning Theory and Practice (3)
- URP 5125 Plan Implementation (3)
- URP 5211 Planning Statistics (3)
- URP 5316 Land-Use Planning (3)
- URP 5847 Growth and Development of Cities (3)
- URP 5930r Professional Topics in Urban and Regional Planning (0) (2 semesters)

Methods for Policy and Planning

A student must take a minimum of six credit hours of coursework:

- URP 5201 Planning Research Methods (3)
- URP 5222 Planning Alternatives Evaluation (3)
- URP 5261 Forecasting for Plan Development (3)

Collaborative and Participatory Methods

A student must take a minimum of three credit hours of coursework:

- URP 5059 Community Involvement and Public Participation (3)
- URP 5122 Planning Dispute Resolution (3)
- URP 5123 Collaborative Governance: Consensus Building for Planners (3)

Specializations

The Department currently offers five pre-designed specializations. They are:

- Environmental Planning
- Neighborhood Planning and Community Design
- Planning for Developing Areas
- Real Estate and Economic Development
- Transportation Planning

All specializations are composed of two required courses and one elective chosen from a specified list. Students are encouraged to design and pursue alternative specialization programs that respond to their particular interests and career goals.

In addition, all students have the opportunity to take coursework in computer applications for planning, including geographic information systems (GIS). Both the Geography and Urban and Regional Planning departments offer GIS coursework. GIS is supported in a forty station College of Social Sciences and Public Policy lab. General computer applications (including spreadsheets, statistical software, word processing, and GIS) are supported in a ten station departmental lab, a GIS research lab, the Department's planning studio facility, and College of Social Science computer labs.

Internship

Experience in the field is an important aspect of professional education. The Department requires all students to be employed in a planning or planning-related agency for the equivalent of 400 hours. Most students satisfy this requirement with full-time employment during the summer between the two academic years; others work part time during the school year. This requirement can be waived with prior relevant experience.

Capstone Requirement

Students are required to complete a capstone research paper, project, or master's thesis during their second year of study. Under the research paper option, the student prepares a paper on a topic of professional interest, addressing the topic in a professionally competent manner. This option is pursued as three semester hours under URP 5910, Directed Individual Research.

Under the project option, students complete work on a project for a client. They may do so individually or as part of a larger project team. The individual option is completed under URP 5910, Directed Individual Research, for three semester hours. The team option is completed under URP 5342, Advanced Planning Problems, for three semester hours.

The master's thesis option requires the completion of a major paper that is of both professional and academic interest. This option is completed under URP 5971, Thesis, for six semester hours.

Joint Law and Planning Graduate Pathway

In the fields of planning and law, there is a growing need for sophisticated professionals who can understand and tackle the challenges created by an increasingly complex legal context for land use, environment, and urban development. With both degrees in hand (JD/MSP), planners and lawyers will have the ability to navigate this terrain with great agility. Planners often have to develop policy language for comprehensive plans, land use codes, and other regulatory or quasi-regulatory programs and policies. Environmental, land use, and urban justice lawyers greatly benefit from not only understanding the legal terrain of these subareas of law, but also the professional context of planning in these areas to enhance their ability to advocate for their clients' interests and understand procedural and substantive constraints on government and non-governmental planning professionals.

The joint graduate pathway between the FSU College of Law and FSU Department of Urban and Regional Planning provides the opportunity for interdisciplinary study that will help students develop an intellectual agility that is critical in the changing legal marketplace and dynamic legal environment of urban and regional planning. Earning the degrees together through a joint graduate pathway both saves student resources of time and money while also allowing the student to benefit from the intellectual and pedagogical intertwining of course content and interpersonal networking opportunities.

The Master of Science in Planning (MSP) is a professional master's degree program intended to prepare urban and environmental planners to work in a variety of settings in government, private planning firms, and nonprofit advocacy organizations. The MSP program is accredited by the Planning Accreditation Board. The Juris Doctor (JD) program is accredited by the American Bar Association Section on Legal Education. The College of Law provides a sophisticated program of study that prepares students to enter the worlds of law, business, and government at the highest possible level. The Department of Urban and Regional Planning and the College of Law offer a Joint Graduate Pathway that allows students to qualify for both the Master of Science in Planning (MSP) and the Juris Doctor (JD) degrees in substantially less time than would be necessary to achieve each independently. Total semester hours required are one hundred twelve, of which thirty-three are taken in planning and seventy-nine in law.

Joint graduate pathway students need not select a planning specialization (in effect, law becomes their specialization), but they must continue to meet all other requirements for the planning degree, including the internship and the capstone project. The Department of Urban and Regional Planning will award the MSP degree only if the student's cumulative grade point average in MSP degree courses is 3.0 or higher. This requirement is in addition to, and does not replace, any other University or departmental academic standing requirements. A member of the law faculty replaces one member of the urban and regional planning faculty on the advisory committee for the capstone project.

Both programs adhere to the university minimum requirements for admission to graduate study. To be considered for the Joint Graduate Pathway, students must be evaluated and admitted by the Admissions Committees of each of the two participating units. In general, students must apply to the Law School and note their interest in the Joint Pathway with planning. Those currently enrolled in either degree program and have not completed twenty-four semester hours of study may apply to the second unit. Admission to that unit shall constitute admission to the Joint Graduate Pathway. Students entering the program for the Joint Pathway must start with a year in Law School before taking coursework in planning.

Joint Planning and Public Administration Graduate Pathway

The professions of planning and public administration are intertwined in numerous ways. Many positions in government can best be filled by persons who possess the knowledge and skills of both administrators and planners. Planners in local governments often aspire to become administrators of governments and planning organizations. Conversely, administrators, especially in rapidly growing governments, may be hampered if they cannot exercise the skills necessary to frame and implement plans.

Very few persons achieve professional competence in both fields; those who do gain substantial career flexibility and attractiveness to prospective employers. The Joint Graduate Pathway at Florida State University is one of only a handful in the nation. It permits the mastery of core knowledge and skills in both areas in three years or less, instead of the four years or more that would otherwise be required. It does so by eliminating duplicative coursework in analytical methods and general electives.

Applicants to the MSP/MPA Joint Graduate Pathway should make formal application through the admissions office of either the Department of Urban and Regional Planning or the School of Public Administration and Policy. To be admitted to the Joint Graduate Pathway, each of the two units must separately admit the applicant to its respective degree program. Those currently enrolled in either degree program, and who have not completed twenty-four semester hours of study, may apply to the second department. Admission to that Department shall constitute admission to the Joint Graduate Pathway.

Total degree hours required for the joint graduate pathway is sixty-six. The student completes the core course requirements of each degree with these exceptions: the student completes **either** the methods requirements of the MSP program or the MPA program, not both. The student selects and completes both an urban and regional planning specialization **and** a public administration concentration. A single internship is required and counts for the requirement for both degrees. A single capstone/project or paper meets the requirements of both degree programs and is completed under **either** URP 5910/5342 or PAD 6908. If completing the paper, the committee shall consist of faculty from each of the units. Students complete the internship and professional paper requirements in the opposite department from which the research sequence is completed.

Each of the two units will award a degree only if the cumulative grade point average for courses with that unit's prefix is 3.0 or higher. This requirement is in addition to, and does not replace, any other University or departmental academic requirements.

It is expected that the student will spend two semesters of full-time study in each department, and then divide remaining coursework between the two

departments. Departmental advisors will provide guidance on the proper sequence of courses for each program. Students who attend one semester of summer school and who complete the internship requirement may be able to complete all degree requirements in two and one-half calendar years.

Joint Planning and International Affairs Graduate Pathway

The joint graduate pathway in Urban and Regional Planning and International Affairs enables students with an interest in international planning, particularly in developing areas, to earn credit in both master's programs and obtain a master's degree for both programs. The MSP program currently requires a specialization in one of six areas, including planning for developing areas. The planning curriculum provides practical conceptual and analytical skills in program and policy design, project management, population and policy analysis, and plan-making as well as grounding in urban and planning theories that will enable international affairs students to enhance their skills and capacities in delivering urban services in international contexts, especially in developing countries. The Planning for Developing Areas specialization prepares students for the challenges of guiding economic and social development in the context of increasing globalization, commonly defined as the increasing interconnectedness of people, places, and institutions worldwide.

Development planners work in urban and rural developing areas around the world. Participating in the joint graduate pathway will allow URP students to increase their course content in internationally focused course material and better contextualize their studies in broader international affairs and relations theories. Meanwhile, IA students will benefit by having the option of pursuing a professional, accredited (Planning Accreditation Board) degree that will increase their opportunity to obtain employment in international affairs or planning, including service in Peace Corps. Consequently, the joint pathway will greatly enhance the educational and career benefits enjoyed by students in each of the two master's programs.

Applicants to the MSP/MS or MA in International Affairs should make formal application through the admissions office of either the Department of Urban and Regional Planning or the International Affairs Program. A full copy of all application materials should be sent to the second unit's admissions office simultaneously. To be admitted to the Joint Graduate Pathway, each of the two units must separately admit the applicant to its respective degree program. Those currently enrolled in either degree program and who have not completed twenty-four semester hours of study may apply to the second unit. Admission to that unit shall constitute admission to the Joint Graduate Pathway.

Total degree hours required for the Joint Graduate Pathway is sixty-four and may be slightly more depending on whether the student selects the thesis or non-thesis (international studio) option. Each of the two units will award a degree only if the cumulative grade point average for courses taken to meet the degree requirements of each unit is 3.0 or higher. The student completes the core course requirements of each degree, and then selects an urban and regional planning specialization. All students complete an internship of 400 hours in a planning or international affairs related agency or organization. The internship should have planning or public policy-related content. Students must complete a capstone in each program.

The student will take courses in at least two other departments participating in the International Affairs program.

The student must also fulfill the requirement for a focus on developing countries. If the student takes the Planning for Developing Areas specialty, this will fulfill the developing areas focus, but if the student opts for a different specialization in Urban and Regional Planning, s/he will need to take three other International Affairs courses to fulfill this requirement. All students must satisfy the foreign language requirement for a Master of Arts (MA) degree even if they choose a Master of Science (MS) degree. Proficiency may be demonstrated by satisfactory performance on the Graduate School Foreign Language Tests of the ETS, by certification by the language department, by taking twelve hours of language with an average grade of "B", or four years of language in high school. Up to six hours of graduate level courses in a foreign language may be used to fulfill the degree requirements as International Affairs electives.

Joint Planning and Public Health Graduate Pathway

Florida State University is one of only a handful of universities offering a joint graduate pathway in planning and public health.

This joint graduate pathway at Florida State University reflects the recent resurgence of interest in what civic stakeholders, local communities, and global society are doing to ensure that urban and urbanizing landscapes are healthy and desirable places for today's world. There is a rich historical tradition linking public health and urban planning. The emergence of urban planning as a profession and academic discipline had its basis in nineteenth-century public

health initiatives, including tenement housing reforms, the construction of urban water supply and sewerage systems, and the design of parks and playgrounds. The work of professionals in these two fields diverged over much of the twentieth century, with public health focusing on the medical model and planning emphasizing land-use and the physical environment. Since the 1970s however, it has been recognized that major improvements in health can result from improving places and the planning processes that shape them, and changing our personal and collective lifestyles, rather than simply investing further in the health (sick) care system. The city and the communities where people live and work provide a useful focus for these concerns because more than half the world's population now lives in urban areas.

Students complete all requirements for the MSP and MPH degrees. The four years it would take to earn these degrees if pursued separately is reduced to three years through the cross-counting of selected courses. The total program of study for joint pathway students to complete both degrees is sixty-six hours.

All students complete a 400 hour internship in a planning or public health related agency or organization. The internship should have planning or public health policy-related content. This may be a paid or unpaid position. The intent of the internship is to give students a unique learning opportunity, allowing them to put many of the concepts and methods learned in the classroom into practice in a realistic professional setting. The internship also serves to help students focus their interest area and coursework for the remainder of their studies, and provides a maturity gained from relevant work experience. Typically, the internship is completed during the summer between the first and second year of study. Many students, however, fulfill this requirement through part-time employment during the school year. Students are not limited to the local area alone for a position. Internships must be approved by the student's advisor and the MSP and MPH program directors.

Students also choose to complete either a research paper, thesis, or studio for MSP capstone credit.

Both programs adhere to the university minimum requirements for admission to graduate study. To be considered for the Joint Graduate Pathway, students must be evaluated and admitted by the Admissions Committees of each of the two participating units. Students apply to one program or the other and note their interest in the Joint Pathway. Those currently enrolled in either degree program and who have not completed twenty-four semester hours of study may apply to the second unit. Admission to that unit shall constitute admission to the Joint Graduate Pathway.

Joint Planning and Demography Graduate Pathway

Demographers study the characteristics and dynamics of human populations. They use tools to collect and analyze data and make forecasts about the size, economic characteristics, and spatial distribution of those populations. Governments, researchers, businesses, and planners are frequent consumers of demographic analysis. Demographic coursework and training is an important complement to graduate education in planning, and planning coursework and training provide important professional opportunities to students in demography. The Joint Graduate Pathway between planning and demography deepens the professional preparation and maximizes the professional prospects for graduate students in both disciplines.

The joint graduate pathway requirements allow students to engage in cross-disciplinary study, emphasizing the overlap between the disciplines. Students complete a minimum of thirty-three credit hours in each program, for a total of sixty-six credit hours. Students complete twenty-four credit hours of planning core classes, nine to twelve credit hours of courses in a planning specialization, twenty-four credit hours of demography core classes, a number of elective classes, and three credit hours of capstone coursework in either discipline. Students also complete a 400 hour planning internship.

Both programs adhere to the university minimum requirements for admission to graduate study. To be considered for the Joint Graduate Pathway, students must be evaluated and admitted by the Admissions Committees of each of the two participating units. Students apply to one program or the other and note their interest in the Joint Pathway. Those currently enrolled in either degree program and who have not completed twenty-four semester hours of study may apply to the second unit. Admission to that unit shall constitute admission to the Joint Graduate Pathway.

International Exchange Programs

Students may also participate in the Department's student exchange programs with the Universiteit van Amsterdam's Faculty of Social and Behavioral Sciences' Master's in Metropolitan Studies or Aalborg University's Department of Development and Planning Master's Program. These programs feature many courses taught in English by faculty experts in European urbanization and international development studies. Students wishing to pursue the exchange program should communicate with their faculty advisor early

in the program so that they can design their program of study to complete all requirements ahead of their exchange experience, which usually takes place in the spring semester of their second year.

Pre-Doctoral Program

In order to encourage high quality master's students to go on for the PhD, the department has created a pre-doctoral program that master's students may apply to, ideally in their first year of study. If accepted into the pre-doctoral program, students may take up to eighteen hours of doctoral-level courses in their second year, which will be counted toward the doctoral degree if they are admitted to the PhD program upon completion of the master's degree. Students electing to pursue this option will therefore be able to complete formal coursework for the PhD with as little as one additional year of courses beyond the master's degree.

Doctoral Program

The Doctor of Philosophy (PhD) program in urban and regional planning seeks to educate highly qualified students who wish to pursue careers in research and teaching concerned with urban and regional systems, planned change, and the enhancement of the ability of society to deal effectively with the future. Florida State doctoral students are oriented toward critical evaluation of existing knowledge and the development of new knowledge for public policy purposes. The degree program has four key components: the program statement, three required theory area courses, one required advanced research methods class, coursework in two substantive areas and in additional research methods, the preliminary examination, and the dissertation.

The doctoral program is a highly individualized program of study, developed under the direction of a faculty supervisory committee, and ordinarily requiring three years of study post-master's degree.

Prerequisites for Doctoral Study

Doctoral students in urban and regional planning must show familiarity with four topical areas covered in courses in the Department's master's core curriculum: URP 5101 Planning Theory and Practice, which is required before taking URP 6102 Seminar in Planning Theory; URP 5211 Planning Statistics, which is required before taking advanced methods courses; URP 5847 Growth and Development of Cities, which is required before taking URP 6846 in Urban and Regional Theory; and URP 5201 Planning Research Methods, which is required before taking URP 6202 Design of Policy-Oriented Research.

Three other options are available for satisfying these prerequisites: 1) completing these courses, 2) evidence of prior coursework that illustrates that the student has mastered the course content, and 3) a formal examination on the course content. The choice among these options lies with the faculty members teaching the courses, although students may insist on a formal examination. When prior coursework is used, a grade of at least "B" (3.0) is required to satisfy the prerequisite. When courses are taken to satisfy a prerequisite, these credits cannot be applied toward the forty-two-credit hour minimum doctoral coursework requirement for the doctoral degree.

Program Statement

The content of each student's program of study is tailored to the objectives and needs of the student and is specified in a program statement that the student prepares in consultation with a major professor and a doctoral committee assembled during the first year of study.

The program statement specifies the academic objectives of the student, the two substantive areas, and the set of methods necessary to achieve those objectives. Because each student's interests are unique, it is unlikely that new doctoral students will follow exactly in the path of earlier doctoral students or each other.

Coursework

The doctoral program requires a minimum of forty-two semester hours of study including three required courses (nine credit hours):

- URP 6102: Seminar in Planning Theory
- URP 6202: Design of Policy Oriented Research
- URP 6846: Seminar in Urban Theory

The program also requires advanced study in one additional advanced theory course (3 hours), research methods (nine credit hours), and two substantive fields to be defined by the student in consultation with committee members (twelve credit hours in one and nine in the other).

Preliminary Examination

Upon completion of courses and development of an approved graduate course syllabus, the student takes his or her Preliminary Examination. This

includes written and oral exams in the areas of planning theory, urban and regional theory, and the substantive areas set forth in the student's program statement.

Dissertation

Upon passage of the Preliminary Examination, the student is advanced to candidacy and prepares a dissertation. The dissertation's scope is laid out in a prospectus, finalized and approved by the student's supervisory committee by the end of the semester in which the student takes the Preliminary Examination. The prospectus may include a statement of the problem that the student is addressing, a discussion of the literature pertaining to that problem, a set of hypotheses that the student intends to test, and a research design for testing the hypotheses. Once the prospectus is approved, the student carries out the research design and completes the dissertation, defending it publicly prior to graduation.

Admissions

Application for admission is usually made for the Fall term. Because of the sequencing of courses, admission for Fall is preferable, but applications are considered for Spring term admission as well. No students are admitted for first enrollment in the Summer term. The deadline for receipt of all materials for admissions applications is July 1 for Fall admission and November 1 for Spring admission. Earlier deadlines apply for financial aid candidates and for applications from non-U.S. students. Financial aid applicants applying for Fall admission must submit all materials by February 15 (January 15 for University and Presidential Fellowships). The deadlines for non-U.S. students are described below. Persons applying after the appropriate deadline will be considered on a space-available basis only.

Applications for admission to the MSP program are welcomed from persons holding a bachelor's degree from an accredited institution of higher learning in the United States, or the equivalent from an institution abroad. No specific major is required, but persons contemplating planning graduate studies are encouraged to earn their undergraduate degree in the humanities (including English or history), a social science (including economics, geography, political science, or sociology), or a design profession (including architecture or engineering). Other majors may be appropriate for persons who intend to specialize in particular fields, such as natural or physical science (biology, chemistry, or geology) for environmental planning or a business major (real estate or finance) for housing, economic development, or growth management.

Applications for admission to the doctoral program are welcomed from persons holding a graduate degree in planning, urban studies, environmental studies, policy sciences, law, the various social sciences, and related fields. Persons with graduate work outside of these areas will also be considered, but, depending on qualifications and previous preparation, may be required to undertake additional graduate coursework prior to beginning doctoral work. Master's students currently enrolled in the Department may apply for admission to the doctoral program and be admitted after having completed substantially all of the coursework required for the master's core and an elected specialty, but without necessarily having completed the master's degree.

The purpose of the admissions process is to judge the applicant's basic intellectual resources, motivations for seeking the degree, probability of successfully completing the program, and the appropriateness of the department's faculty and course offerings to the student's program and career interests.

A complete admission application consists of a Florida State University application for graduate study, a supplementary questionnaire for applicants to the MSP or PhD program, official transcripts for all previous college or university work, an official transcript of scores on the general test of the Graduate Record Examination (GRE), and letters of recommendation. Persons unfamiliar with the GRE exam should consult the testing or placement office at a U.S. university, the Educational Testing Service of Princeton, New Jersey, or a U.S. consulate abroad. Application forms and information materials may be obtained from the department's website: <http://www.coss.fsu.edu/durp/>.

Letters of recommendation should be requested from those best able to accurately assess the scholastic abilities and potential accomplishments of the applicant. These letters should speak directly to the applicant's ability to complete graduate study in urban and regional planning. Two letters are required for MSP admissions, three for PhD admissions. We endeavor to keep these letters confidential within the limits of federal and state law. In order to maximize confidentiality, letters may be destroyed after the admissions process is complete.

The admissions committee conducts a thorough review of all available credentials in its deliberations. This review includes examination of work accomplishments, extracurricular and civic activities, and other non-quantifiable information. Effort is made to ensure that our class reflects diversity in background and perspective both because this improves the level of discourse in our classrooms and because women and persons of color have been historical-

ly underrepresented in the profession of urban planning. Ultimately, admission is based on the committee's assessment that the applicant is capable of successful graduate work and that the applicant will become a planner who will utilize the degree to contribute meaningfully to the profession and the society.

Non-U.S. Applicants should complete their applications by February 15 for Fall term admission and by September 1 for Spring term admission. These applications must include a confidential financial statement necessary for visa purposes that is normally supplied with the international admissions application forms. Applicants whose native language is not English (and who have not received a degree from a college or university in an English-speaking nation) must submit Official English Language Proficiency results from one of the following testing agencies: Test of English as a Foreign Language (TOEFL), with a minimum score of 550 (paper-based), 213 (computer-based), or 80 (Internet-based); Michigan English Language Assessment Battery (MELAB), with a minimum score of 77; International English Language Testing System (IELTS), with a minimum score of 6.5. The test of the English language is required before admission will be considered. Questions concerning certification of financial independence and health status relevant to the issuance of a U.S. immigration form I-20 should be addressed to the *Center for Global Engagement, Student Services Coordinator, Florida State University, 945 Learning Way, P.O. Box 3064240, Tallahassee, FL 32306-4240 U.S.A.*

In addition to the required written application, applicants are encouraged to come to Tallahassee for a personal interview. This permits a clearer exchange of information, provides the department with a firmer sense of the applicant's goals, and allows the applicant to evaluate resources available first hand. The admissions assistant will arrange an interview on request.

Definition of Prefix

URP—Urban and Regional Planning

Graduate Courses

Planning Theory and Practice

URP 5059. Community Involvement and Public Participation (3). This course develops the skills and perspectives for determining why and how to engage citizens in public decisions moving along the spectrum of participation from informing to consulting, involving, collaborating, and empowering. The course provides practical skill development in community engagement processes, design, and methods.

URP 5101. Planning Theory and Practice (3). This course is a general introduction to the field of planning, examining the intellectual heritage and procedural approaches shared by practitioners working in all areas of contemporary planning practice. The course also introduces students to the general area of planning theory and some of the fundamental political and ethical issues they face in planning practice.

URP 5122. Planning Dispute Resolution (3). This course focuses on how complex regulatory disputes frequently slow public sector decision making and cripple major private sector investments. Parties to disputes such as location of locally unwanted land uses, setting of air and water quality standards, and evaluation of urban and transportation plans frequently fail to cooperate to achieve the best possible outcome. The course examines why this is so and tries to develop the skills necessary for individuals to improve the outcome in contentious decision making.

URP 5123. Collaborative Governance: Consensus Building for Planners (3). This course prepares students to effectively build consensus and to resolve conflicts involving building permits, locally unwanted land uses, environmental regulations, community visions, projects, programs, allocation of public funds and services, intergovernmental battles, and controversial agency rules. The course explores constructive alternatives to unilateral or adversarial methods of decision-making that often drain public and private resources unnecessarily, damage important relationships, and either result in less than ideal solutions or fail to resolve the disputes at all.

URP 5125. Plan Implementation (3). This course explores topics such as the legal aspects of plan making, implementation politics, policy implementation, interorganizational cooperation, and public participation, under the general rubric of plan adoption and implementation strategies.

URP 5316. Land-Use Planning (3). Prerequisite: URP 5272. Pre- or corequisite: URP 5312. This course focuses on preparation of the urban land-use plan including data collection; evaluation of location, market, and environmental factors; and balancing of stakeholder interests.

URP 5342. Advanced Planning Problems (3). Pre- or corequisites: URP 5222, URP 5261, and instructor permission. This course involves team study of specialized planning problems. The course also requires teams of students to select problems to which the planning process can be applied and which require the use of methods and techniques learned in the core program and in a student's specialization. The course, along with the thesis (URP 5971r) or research paper (URP 5910) options, serves as the terminal requirement of the program.

URP 5544. Gender and Development (3). This course examines the effects of planned and unplanned development on women. The course also allows students to analyze the strategies pursued to address productive roles of women, not reproductive roles.

URP 5805. Multicultural Urbanism (3). This course deepens students' understanding of the urban cultural, social and economic landscape. Students explore the historical formation of cultural enclaves stemming from immigration, migration, slavery and segregation. The course also explores the formation of spatial organization stemming from policy and social dynamics related to race, ethnicity, gender and sexual identity as well as the present-day implications of multicultural urban spaces.

URP 6102. Seminar in Planning Theory (3). In this course, planning is viewed as the attempt to apply the methods and findings of the sciences to practical questions of public policy. Philosophy of science, ethical theory, and political philosophy are examined for the implications each has for this view.

Planning Methods

URP 5201. Planning Research Methods (3). This course focuses on the social-science research process. Topics include the linkage between theory and research, conceptualization and operationalization of the research problem, study designs, sampling, data sources and collection techniques, the logic of data analysis, as well as computer use.

URP 5211. Planning Statistics (3). This course offers an introduction to descriptive and associative statistics as applied to public-policy problems encountered by planners. Topics include basic definitions and descriptive measures, probability theory, sampling, and inference. Elementary multivariate techniques are covered, including those appropriate to the analysis of nominal and interval scales.

URP 5222. Planning Alternatives Evaluation (3). Prerequisites: URP 5101, URP 5201, or instructor permission; and major status. This course focuses on a systems-analysis approach as a means of analyzing problems and formulating action alternatives. Emphasis is given to techniques of modeling, applied economic analysis, probability and risk, goals achievement, as well as cost benefit and cost effectiveness in the assessment of alternative courses of action.

URP 5261. Forecasting for Plan Development (3). This course deals with the methods used in plan analysis and development. Emphasis is given to demographic analysis and population-projection techniques, to economic-base analysis and economic-projection methods, as well as to methods for preparing a land-use plan. Students are required to use these methods in preparing a demographic, economic, and land-use analysis for a Florida county and subcounty area.

URP 5272. Urban and Regional Information Systems (3). This course is designed to provide students with an understanding of how geographic information systems can be applied to planning practice and research. Students are introduced to the basic concepts, structures, and functions of geographic information systems and their applications to planning research and practice as well as to effective communication of planning information through electronic and print media.

URP 5279. Urban and Regional Information Systems Practicum (3). Prerequisite: URP 5272. This is an "enterprise course," reflecting the organization of most urban planning geographic information systems departments within public agencies. Students work with various clients on a variety of requests and serve as urban geographic information systems technicians to these clients.

URP 5885. Graphics Communications for Urban Planning and Design (3). This course offers the basic graphic-representation skills required for communicating solutions to planning and urban-design problems. Topics cover the basic principles of graphic design; manual graphic communication; digital image editing techniques to represent 2-D aerial and plan views of existing or proposed conditions and elevations; as well as the use of visualization software to compose vector-based illustrations of physical-planning solutions to urban design and policy-based questions.

URP 6202. Design of Policy-Oriented Research (3). Prerequisites: URP 5201 and URP 5211. The course discusses the process and design of empirical research used in the analysis of policy and planning problems. Strengths and weaknesses of alternative research designs are considered from an epistemological viewpoint. Strategies for overcoming design limitations imposed by policy contexts are emphasized.

Urban Growth Process

URP 5847. Growth and Development of Cities (3). This course is an introduction to the various economic, social, demographic, technological, political, and environmental factors affecting the location, development, and growth or decline of cities, as well as the distribution of activities (industry, commerce, population, public facilities) within them.

URP 6846. Seminar in Urban Theory (3). Prerequisite: URP 5847. This course concentrates on the urban theory component of urban and regional theory, referring to the patterns and processes of development within cities. An emphasis is placed on the theories of human ecology, economics, and geography, and the translation of these theories into a planning perspective.

Planning for Developing Areas

URP 5610. Introduction to Development Planning (3). This course analyzes the problems of developing countries as integral parts of a more general process of the development of human societies on a global scale. The approach to the issues and problems of development is spatial. Such an approach permits consideration of the economic, social, political, and cultural aspects of the development process within an interdisciplinary framework focusing on urban and regional development as embodiment of concerns with the general quality of human life and the natural environment. The process of development as it goes on in all countries is examined by a focus on the set of conditions leading to problems of development in most societies and on the nature of development paths which have been pursued by other nations as they seek to transform their national spatial structures.

URP 5611. Strategies for Urban and Regional Development in Less Developed Countries (3). This course approaches the question of formulating and implementing effective strategies for development by identifying the obstacles and opportunities for planned change in less developed countries. The course is organized to explore the issue of development strategy at three levels: the international setting, national, and sub-national levels. At each geographic level, the relevant theories and available policy options are presented and evaluated. The need is established for strategy that incorporates a spatial perspective in which the unique characteristics of people and places are recognized.

URP 5616. Project Planning in Developing Countries (3). The course utilizes the project cycle and uses it as a reference point to discuss the following issues: problem identification and basic needs assessment, feasibility studies, selection of most appropriate activities, implementation and evaluation of results. The course also explores the implications for blueprint vs. process oriented approaches to project design and implementations.

Environmental Planning

URP 5405. River Basin Planning and Management (3). This course introduces river-basin management and planning and takes a systemic approach from biological, hydrological, and geopolitical viewpoints. Special emphasis is placed on the planning and management of transboundary (interstate and international) basins. The course focuses on world river-basin systems as well as on the local Apalachicola-Chattahoochee-Flint basin. Students are introduced to technical concepts and tools, including negotiation and math simulation tools.

URP 5407. Food Systems Planning (3). This course provides a contextual understanding of food systems in the formations of cities, the impacts of food policy on food systems, and planning responses to the many challenges that arise in relation to the globalized food system.

URP 5421. Introduction to Environmental Planning and Natural Resource Management (3). This course provides a general introduction to the related problems of resource management and environmental planning through an overview of problems, potential solutions, and their relation to methodologies, existing institutions, and other public policy areas such as land-use controls and regional development. Students are expected to become familiar with a series of fundamental concepts from environmental science and engineering, environmental economics, and environmental politics that are important to evaluating alternatives courses of action. Students also gain familiarity with the basic analytic approaches to valuing and comparing environmental projects, plans, and policies.

URP 5422. Coastal Planning (3). This course examines the planning and management of coastal environments including coastal geomorphic processes, coastal ecosystems, legal structures, and regulatory strategies. Issues include shoreline protection, critical lands management, provision of public utilities, public access, and sea level rise.

URP 5424. Sustainable Development Planning in the Americas (3). This course examines various dimensions of the "sustainable development" paradigm and its local-global policy implications, issues, and controversies with a focus upon North America and Latin America. Organized in three modules: 1) environmental philosophies that have influenced the movement; 2) North American approaches to planning for sustainable development; and 3) critical issues of sustainable development in Latin America.

URP 5425. Methods of Environmental Analysis (3). Prerequisite: URP 5421, URP 5427, or instructor permission. This course examines available methods of environmental impact analysis and control. Primary emphasis is placed on water quality, wastewater treatment, and air pollution control, although topics such as noise and solid waste pollution are also considered.

URP 5427. Environmental Legislation and Policy (3). This course introduces legal concepts and doctrines relevant to pollution controls and the assessment of environmental impacts. The roles of courts, legislatures, and administrative agencies, in responding to the problems and formulating control strategies, are examined.

URP 5429r. Special Topics in Environmental Planning and Resource Management (3). This course is an advanced seminar in selected special topics relating to environmental policy and resource management issues. Content varies. May be repeated to a maximum of six semester hours.

URP 5445. Climate Change and Community Resilience (3). This course introduces students to key themes, concepts, and debates that shape the intersections of climate change vulnerability, disaster risk, and adaptive community resilience. May be repeated to a maximum of six semester hours.

Real Estate and Economic Development Planning

URP 5312. Perspectives and Issues of Comprehensive Planning and Growth Management (3). This course is an introduction to the problems and needs for growth management and comprehensive planning in U.S. cities, covering public and private perspectives on development and growth management, state and national institutions involved in development, and planning approaches available for meeting the growth management problem.

Transportation Planning

URP 5350. Pedestrian-oriented Communities (3). Prerequisite: URP 5312 or URP 5711. This course consists of examination and application of proposals for the New Urbanism, including prospects for increasing transit use and pedestrian access through land development code changes and multi-use district designations.

URP 5355. International Transportation Planning (3). This course provides an overview of the broad area of international transportation planning. The course features analyses of a number of specific case studies of transportation planning from around the world, including from Europe, Canada, China, India, Russia, Africa and the developing world, and includes analytical exercises that are relevant to growing international transportation planning challenges.

URP 5711. The Transportation Planning Process (3). This course is an introduction to various aspects of contemporary U.S. transportation problems, sources of funding, and legislation. The course also presents the theory and methods employed by planners in the process of resolving transportation problems through investment decision plans.

URP 5716. Transportation and Land Use (3). This course addresses the land use implications of transportation investments and explores strategies for transportation and land use planning that are environmentally sound, socially efficient, and equitable.

URP 5717. Methods of Transportation Planning (3). This course provides students with a basic hands-on exposure to the principal tools of transportation demand forecasting, including both elasticity-based analyses and the more elaborate techniques incorporated into the urban transportation modeling system (UTMS, also known as the four-step model).

Neighborhood Planning and Community Design

URP 5445. Climate Change and Community Resilience (3). This course introduces students to key themes, concepts, and debates that shape the intersections of climate change vulnerability, disaster risk, and adaptive community resilience.

URP 5540. State and Local Economic Development (3). This course analyzes strategies and tools for developing employment and investment in state and local economies. Considers programs targeted to depressed urban neighborhoods, rural communities, downtown commercial areas and specific business sectors.

URP 5615. Infrastructure and Housing in Less Developed Countries (3). This course examines infrastructure and housing issues in developing countries, including relationship between infrastructure and development, demand and supply of new facilities, financing alternatives, squatter housing, and self-help strategies.

URP 5742. Problems and Issues in Housing and Community Development (3). This course introduces housing and community development issues, problems, and policy. Attention is focused on the operation of the housing market, historical development of housing and community development problems, and the evaluation of public and private sector responses to these problems.

URP 5743. Neighborhood Planning (3). This course focuses on ways in which planning can enable neighborhood residents to enhance the attractiveness of their neighborhood. The course is for planners who work with neighborhood groups or who are employed by neighborhood organizations or community development corporations.

URP 5749r. Special Topics in Housing and Community Development (3). This course is an advanced seminar in selected housing and community development issues and problems. Content varies. May be repeated to a maximum of six semester hours.

Other Graduate Courses

URP 5905r. Directed Individual Study (1–3). (S/U grade only). May be repeated to a maximum of nine semester hours.

URP 5910r. Directed Individual Research (1–3). (S/U grade only). May be repeated to a maximum of nine semester hours.

URP 5930r. Professional Topics in Urban and Regional Planning (0). (S/U grade only). This course is offered at zero credit hours as an administrative mechanism for insuring that students in the master's program complete a series of professionally oriented field trips, visiting lectures, and workshops. These events are offered throughout the semester. Master's students are required to attend these events over two of the semesters in which they are enrolled in the program. Offered for majors only.

URP 5939r. Special Topics in Urban and Regional Planning (0–3). This course is a selected topics seminar for the examination of topical issues not fully covered in other courses of the program. Content varies. May be repeated to a maximum of nine semester hours.

URP 5971r. Thesis (2–6). (S/U grade only). Thesis must be completed for a total of either three or six credits. May be repeated to a maximum of six semester hours.

URP 6938. Doctoral Research Colloquium (0). (S/U grade only).

URP 6980r. Dissertation (1–12). (S/U grade only).

URP 6981r. Supervised Teaching (1–3). (S/U grade only). May be repeated to a maximum of three semester hours.

URP 8960r. Preliminary Examination Preparation (0–12). (S/U grade only). Prerequisites: URP 6102, URP 6846, and URP 6938. This course is preparation for the doctoral preliminary examination. May be repeated to a maximum of twelve semester hours. May be repeated in the same semester.

URP 8969r. Preliminary Doctoral Examination (0). (P/F grade only.)

URP 8976r. Master's Thesis Defense (0). (P/F grade only.)

URP 8985r. Dissertation Defense (0). (P/F grade only.)

**VISUAL DISABILITIES:
see Teacher Education**

Graduate Program in WOMEN'S STUDIES AND WOMEN'S GENDER, AND SEXUALITY STUDIES

COLLEGE OF ARTS AND SCIENCES

Website: <http://ws.artsandsciences.fsu.edu/>

Director: Maxine Jones (History/ Women's Studies); **Participating Faculty:** Falk, Thomas (Anthropology); Lindbloom (Art); Bearor, Neuman (Art History); N. DeGrummond, Fulkerson, Pullen, Sickinger, Slaveva-Griffin (Classics); Jordan, Laurents, McDowell, Nudd (Communication); Schwartz (Education); Edwards, Gaines, Gardner, Goodman, Lathan, Laughlin, McGregory, Montgomery, Richardson (English); Rehm (Family and Child Sciences); Herrera, Hicks, Jones, Koslow, McClive, Mooney, Upchurch Jr., Renfro, Sinke (History); Ralston (Human Sciences); Stoddard (Humanities); Boutin, Cappuccio, Leushuis, Maier-Katkin, Poey, Wang (Modern Languages and Linguistics); Maheffey, Morales (Philosophy); Eckel, Hull, Keel, Kistner (Psychology); Cuevas, Dupuigrenet, Kalbian, Kavka, Kelsay (Religion); Ashmore, Dwyer, Edwards, Gomory, Wilke (Social Work); Barrett, Brewster, Buggs, Lessan, Munson, Padavic, Roach, Rohlinger, Schrock, Taylor, Tillman, Waggoner (Sociology); Osborne (Theatre); Doan, (Urban and Regional Planning)

The programs in Women's Studies and Women's, Gender, and Sexuality Studies examine the accomplishments and perspectives of women in history, culture, and contemporary society. The programs establish gender and sexuality as fundamental categories of social and cultural analysis. Drawing on disciplines across the university, the programs offer interdisciplinary perspectives from which to study the diversity of human experience. The courses foster critical analysis of the social meaning of gender and gender expression and examine sexual identities, discourses, and institutions as they intersect with class, race, ethnicity, nationality, and transnational movements, drawing on the full range of approaches adopted within feminist and Queer scholarship.

Requirements for a Minor in Women's Studies

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Graduate students can devise a minor field in women's studies with the approval of their major professor and the approval of the director of the Women's Studies Program. A women's studies minor at the MA level shall consist of nine semester hours of approved courses. A women's studies minor at the PhD level shall consist of twelve semester hours of approved courses. One approved course from the student's degree-granting program can be counted toward the women's studies MA or PhD minor as long as the course is not used to fulfill credit hours in the degree program. Courses shall be selected from among approved women's studies courses, seminars, colloquia, and directed individual study.

Approved Courses

Note: See the appropriate individual departments for full course descriptions.

- AMH 5567** Women in 19th-century America (3)
- AMH 5935** Women and Children in the Civil Rights Movement (3)
- CCJ 5672** Gender, Crime and Justice (3)
- EDF 5706** Gender and Education in Comparative Perspective (3)
- LIT 5388r** Studies in Women's Writing (3)
- LIT 5517** Studies in Gender in Literature (3)
- SOW 5109** Woman's Issues and Social Work (3)
- SOW 5153** Human Sexuality (3)
- SOW 5614** Family Violence Across the Life Span (3)
- SOW 5628** Mental Health of Diverse Populations (3)
- SPW 5486** Contemporary Spanish Women Writers (3)
- SPW 5496** Spanish-American Women Writers (3)
- SYD 5225** Fertility (3)
- SYD 5817** Contemporary Theories of Gender (3)
- SYO 5177** Family Demography (3)
- SYO 5376** Sociology of Gender and Work (3)
- SYO 5547** Race and Gender in Organizations (3)
- SYP 6356** Sociology of the Contemporary Women's Movement (3)
- THE 5437** Gender, Race and Performance (3)
- URP 5544** Gender and Development (3)

Definition of Prefix

WST—Women's Studies

Graduate Courses

WST 5616. Contemporary Gendercide (3). This course teaches students about contemporary gendercides, or the systematic killing of members of a specific sex. The course discusses both femicide (the killing of women) and androicide (the killing of men). Throughout this class, students examine instances of gendercide in the 20th and 21st centuries and explore the reasons for this phenomenon.

WST 5905r. Directed Independent Study (1-3). (S/U grade only). Prerequisite: At least one women's studies course. This course is for graduate students who wish to supplement the regular course offerings on women/gender by independent reading or research under guidance. May be repeated to a maximum of three semester hours.

WST 5934r. Topics in Women's Studies (3). This course explores specific topics or themes in gender/women's studies based on a feminist approach. A variety of topics from different fields of study are offered from an interdisciplinary perspective. Topics of material not normally covered in the regular curriculum are offered. May be repeated to a maximum of nine semester hours.

ZOOLOGY:
see Biological Science

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- Hollander, Myles,** PhD, Stanford; Distinguished Research Professor, 1995–1996, Robert O. Lawton Distinguished Professor, 1998–1999, and Professor of Statistics
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- Taber, Samuel,** PhD, Stanford; Distinguished Research Professor, 2001–2002, Professor of Physics
- Taylor, Kenneth A.,** PhD, California at Berkeley; Distinguished Research Professor 2001–2002, Professor of Biological Science
- Dalal, Nar S.,** PhD, British Columbia; Dirac Professor of Chemistry, 2001, Distinguished Research Professor, 2002–2003, and Chair of Chemistry
- Nof, Doron,** PhD, Wisconsin; Distinguished Research Professor, 2002–2003, and Fridtjof Nansen Professor of Oceanography, 2001
- Tschinkel, Walter R.,** PhD, California at Berkeley; Distinguished Research Professor, 2002–2003, and Margaret Y. Menzel Professor of Biological Science, 1999
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- Brooks, James S.,** PhD, Oregon; Distinguished Research Professor, 2004–2005, Grace C. and William G. Moulton Professor of Physics, 2002
- Chandra, Namas,** PhD, Texas A&M; Distinguished Research Professor, 2004–2005, Krishnamurty Karamcheti Professor of Engineering, 2000, and of Mechanical Engineering
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- de Grummond, Nancy T.,** PhD, North Carolina; Distinguished Research Professor, 2007–2008, M. Lynette Thompson Professor of Classics, 1999
- Manousakis, Efstratios,** PhD, Illinois at Urbana-Champaign; Distinguished Research Professor, 2007–2008, Donald Robson Professor of Physics, 2003, Professor of Physics, and Scholar/Scientist, Computational Science and Information Technology
- Schlenoff, Joseph,** PhD, Massachusetts, Amherst; Distinguished Research Professor, 2007–2008, Leo Mandelkern Professor of Polymer Science, 2003, Professor of Chemistry and Biochemistry
- Johnson, Suzanne B.,** PhD, State University of New York at Stony Brook; Distinguished Research Professor, 2008–2009, Professor and Chair of Medical Humanities and Social Sciences (Retired)
- Prosper, Harrison B.,** PhD, Manchester, Britain; Distinguished Research Professor, 2008–2009, Kirby Kemper Professor of Physics
- Turner, Robert J.,** PhD, Syracuse; Distinguished Research Professor, 2008–2009, Marie E. Cowart Professor of Epidemiology and Sociology
- Burnett, William C.,** PhD, Hawaii; Distinguished Research Professor, 2009–2010, Carl Henry Oppenheimer Professor of Oceanography, 2002
- Locke, Bruce R.,** PhD, North Carolina State; Distinguished Research Professor, 2009–2010, Professor of Engineering

Rikvold, Per Arne, PhD, Temple; Distinguished Research Professor, 2009-2010, James Gust Skofronick Professor of Physics, 2003, Professor of Physics and Scholar/Scientist, School of Computational and Information Technology

Wetherby, Amy, PhD, California at Santa Barbara; Distinguished Research Professor, 2009-2010, Laurel L. Schendel Professor of Communication Disorders, 2000

Lonigan, Chris, PhD, State University of New York at Stony Brook; Distinguished Research Professor, 2010-2011, Professor of Psychology

Wang, Ben, PhD, Pennsylvania State; Distinguished Research Professor, 2010-2011, Simon Ostrach Professor of Engineering

Yancey, Kathleen Blake, PhD, Purdue; Distinguished Research Professor, 2010-2011, Kellogg W. Hunt Professor of English

Zhou, Huan-Xiang, PhD, Drexel; Distinguished Research Professor, 2010-2011, Professor of Physics

Berg, Bernd, PhD, Free University of Berlin; Distinguished Research Professor, 2011-2012, Paul A. Dirac Professor of Physics

Chassignet, Eric, PhD, Miami; Distinguished Research Professor, 2011-2012, Director, Center for Ocean-Atmospheric Prediction Studies (COAPS), Professor of Physical Oceanography

Taylor, Gary, PhD, Cambridge; Distinguished Research Professor, 2011-2012; George Matthew Edgar Professor of English

Wang, Xuoxin, PhD, Massachusetts, Amherst; Distinguished Research Professor, 2011-2012; Professor of Psychology

Alamo, Rufino, PhD, Complutense University of Madrid; Distinguished Research Professor, 2012-2013; Professor of Chemistry and Biomedical Engineering

Schmidt, Norman "Brad", PhD, University of Texas at Austin; Distinguished Research Professor, 2012-2013; Professor of Psychology

Whalley, David, PhD, University of Virginia; Distinguished Research Professor, 2012-2013; Professor of Computer Science

Falk, Dean, PhD, University of Michigan-Ann Arbor; Distinguished Research Professor, 2013-2014; Professor of Anthropology

McMahon, Darrin, PhD, Yale University; Distinguished Research Professor, 2013-2014; Ben Welder Professor of History

Srivastava, Anuj, D.Sc., Washington University, St. Louis; Distinguished Research Professor, 2013-2014; Professor of Statistics

Spector, Alan, PhD, Florida State University; Distinguished Research Professor, 2014-2015; Professor of Psychology

Gilbert, David, PhD, Stanford University; Distinguished Research Professor, 2014-2015; Professor of Biological Science

Becker, Betsy A., PhD, University of Chicago, Distinguished Research Professor, 2016; Professor of Education

Piekarewicz, Jorge, PhD, University of Pennsylvania, Distinguished Research Professor, 2016; Professor of Physics

Corrigan, John A., PhD, University of Chicago, Distinguished Research Professor, 2017; Lucius Moody Bristol Distinguished Professor, Edwin Scott Gaustad Professor of Religion and Professor of History

Reina, Laura, PhD, University of Rome "La Sapienza"; Distinguished Research Professor, 2017; Professor of Physics

Thyer, Bruce A., PhD, University of Michigan-Ann Arbor, Distinguished Research Professor, 2017; Professor of Social Work

Distinguished Teaching Professors

Clark, Ronald J., PhD, Kansas; Distinguished Teaching Professor, 1989-1990, Professor of Chemistry (Retired)

Hofer, Kurt G., PhD, Vienna; Distinguished Teaching Professor, 1989-1990, Robert O. Lawton Distinguished Professor, 1994-1995, Professor of Biological Science (Retired)

Howard, Donald D., PhD, Minnesota; Distinguished Teaching Professor, 1989-1990, Eminent Scholar and Professor of History (Retired)

Madsen, Clifford K., PhD, Florida State; Distinguished Teaching Professor, 1989-1990, Alumni Professor, 1985-1988, Robert O. Lawton Distinguished Professor, 1988-1989, Professor of Music (Retired)

Mellon, Edward K., PhD, Texas; Distinguished Teaching Professor, 1989-1990, Chair and Professor of Chemistry (Retired)

Jones, James P., PhD, Florida; Distinguished Teaching Professor, 1990-1991, Professor of History

Lhamon, W. T., Jr., PhD, Indiana; Distinguished Teaching Professor, 1990-1991, George M. Harper Professor of English, 2000 (Retired)

Rashotte, Michael E., PhD, Toronto; Distinguished Teaching Professor, 1990-1991, Professor of Psychology

Rogers, William W., PhD, North Carolina; Distinguished Teaching Professor, 1990-1991, Professor of History (Retired)

Sandon, Leo, PhD, Boston; Distinguished Teaching Professor, 1990-1991, Chair and Professor of Religion, and Director, Program in American Studies (Retired)

Burroway, Janet G., MA, Distinguished Teaching Professor, 1991-1992, Service Professor of English, Robert O. Lawton Distinguished Professor, 1995-1996, and

McKenzie Professor, 1986 (Retired)

Levenson, David B., PhD, Harvard; Distinguished Teaching Professor, 1992-1993, Associate Professor of Religion

Smith, James C., PhD, Florida State; Distinguished Teaching Professor, 1993-1994, Professor of Psychology, Robert O. Lawton Distinguished Professor, 1992-1993 (Retired)

Leach, Stephen P., PhD, Florida State; Distinguished Teaching Professor, 1994-1995, Assistant Scholar/Scientist of Computer Science

Walker, Eric C., PhD, North Carolina at Chapel Hill; Distinguished Teaching Professor, 1995-1996, Professor of English

Darling, Carol A., PhD, Michigan State; Distinguished Teaching Professor, 1996-1997, Professor of Family and Child Sciences, and Margaret Rector Sandels Professor of Human Sciences, 1999

Goldsby, Kenneth A., PhD, North Carolina; Distinguished Teaching Professor, 1997-1998, Associate Professor of Chemistry

Moore, Dennis D., PhD, North Carolina; Distinguished Teaching Professor, 1998-1999, Associate Professor of English

Reiser, Robert A., PhD, Arizona State; Distinguished Teaching Professor, 1999-2000, Professor of Educational Research

Fenstermaker, John J., PhD, Ohio State; Distinguished Teaching Professor, 2000-2001, Distinguished Research Professor, 2001-2002, Fred L. Standley Professor of English, 2002 (Retired)

Sathe, Shridhar, PhD, Utah State; Distinguished Teaching Professor, 2002-2003, D.K. Salunkhe Professor of Food Science, 2001, and Professor of Nutrition, Food and Exercise Sciences

Everage, Karen Burgess, MS, Florida State; Distinguished Teaching Professor, 2003-2004, and Associate In Mathematics

Quimet, Charles C., PhD, Brown; Distinguished Teaching Professor, 2004-2005, Professor and Faculty Scholar in Neuroscience

Carroll, Pamela S., EdD, Auburn; Distinguished Teaching Professor, 2005-2006, Dwight L. Burton Professor of English Education, 2006, and Professor of Middle and Secondary Education

Kirby, David K., PhD, Johns Hopkins; Distinguished Teaching Professor, 2006-2007, Robert O. Lawton Distinguished Professor, 2003-2004, McKenzie Professor, 1989, Professor of English

Christiansen, William A., PhD, Utah; Distinguished Teaching Professor, 2007-2008, Chair and Associate Professor of Finance

Ziegler, Mark, MA; Distinguished Teaching Professor, 2008-2009, Associate In Communications

Coats, Pamela K., PhD, Nebraska-Lincoln; Distinguished Teaching Professor, 2009-2010, Robert C. Earnest Professor of Finance, 2002

Quandagno, Jill, PhD, Kansas; Distinguished Teaching Professor, 2010-2011, Mildred and Claude Pepper Eminent Scholar in Social Gerontology, 1987, and Professor of Sociology

Mcwey, Lenore M., PhD, Florida State; Distinguished Teaching Professor, 2011-2012, Associate Professor of Family and Child Sciences

Shaftel, Matthew R., PhD, Yale; Distinguished Teaching Professor, 2012-2013, Associate Professor of Music

Schwabe, Annette M., PhD, Kent State University; Distinguished Teaching Professor, 2013-2014, Senior Teaching Faculty in Sociology

Terebelski, Patricia Spears, PhD, Florida State University; Distinguished Teaching Professor, 2014-2015, Teaching Faculty III in Biological Science

Scott, Lisa A., PhD, University of Nebraska; Distinguished Teaching Professor 2015-2016; Director of Clinical Education, L.L. Schendel Speech and Hearing Clinic

Raney, Arthur A., PhD, University of Alabama; Distinguished Teaching Professor 2016-2017; James E. Kirk Professor of Communication

Erickson, Gregory M., PhD, University of California-Berkeley; Distinguished Teaching Professor, 2017-2018; Professor of Biological Science

Parks, IV, John W., DMA, Eastman School of Music; Distinguished Teaching Professor, 2018-2019; Professor of Music (Percussion)

Ormsbee, Michael J., PhD, East Carolina University, Greenville, NC; Distinguished Teaching Professor, 2019-2020; Professor of Nutrition, Food, and Exercise Sciences

McKenzie Professors

Berkley, Karen J., PhD, Washington; Distinguished Research Professor, 2003-2004, McKenzie Professor 1989, Professor of Psychology (Retired)

Burroway, Janet G., MA, McKenzie Professor 1987, Service Professor of English (Retired)

Dye, Thomas R., PhD, Pennsylvania; McKenzie Professor 1987, Service Professor of Political Science

Hintikka, Jaako, PhD, Helsinki, Finland; McKenzie Professor 1987, Professor of Philosophy (Retired)

Howard, Louis N., PhD, Princeton; McKenzie Professor 1987, Professor of Mathematics (Retired)

Hunter, Christopher, PhD, Cambridge; McKenzie Professor 1991, Chair and Profes-

sor of Mathematics (Retired)

Kirby, David K., PhD, Johns Hopkins; McKenzie Professor, 1989, Robert O. Lawton Distinguished Professor, 2003–2004, Professor of English,

Winstead, William O., MM, McKenzie Professor 1987, Professor of Music (Resigned)

Daisy Parker Flory Alumni Professors

Madsen, Clifford K., PhD, Florida State; Alumni Professor 1985–1988, Distinguished Professor 1988–1989, Distinguished Teaching Professor, 1989–1990, Professor of Music (Retired)

Martin, Patricia Y., PhD, Florida State; Alumni Professor 1989, Professor of Sociology (Retired)

Standley, Fred L., PhD, Northwestern; Alumni Professor 1985, Professor of English (Retired)

Eppes Professors

Baumeister, Roy F., PhD, Princeton; Eppes Professor, 2002, Professor of Psychology

Butler, Robert O., MA, Eppes Professor 2000, Professor of English

Farrell, Suzanne, Eppes Professor, 2000, Professor of Dance

Ferris, Gerald R., PhD, Illinois at Urbana-Champaign; Eppes Professor, 2000, Professor of Management and Psychology

Foorman, Barbara R., PhD, California at Berkeley; Eppes Professor, 2006, Professor of Education

Froelich, Phillip, PhD, Rhode Island; Eppes Professor, 2003, Professor of Oceanography (Retired)

Greene, Laura, PhD, Cornell University; Eppes Professor, 2015, Professor of Physics, National High Magnetic Field Laboratory

Gunzburger, Max D., PhD, New York; Eppes Professor, 2002, Professor of Scientific Computing

Kroto, Harold W., PhD, University of Sheffield; Eppes Professor of Chemistry, 2004, and Nobel Laureate in Chemistry, 1996 (Deceased)

LaPointe, Leonard L., PhD, Colorado at Boulder; Eppes Professor, 2000, Professor of Communication Disorders

Larbaestier, David C., PhD, Imperial College London; Eppes Professor, 2006, Professor of Superconducting Materials

McClure, Charles R., PhD, Rutgers; Eppes Professor, 1999, Professor of Information Studies

Scholz, John T., PhD, California at Berkeley; Eppes Professor, 2001, Professor of Law

Swofford, David L., PhD, University of Illinois Central Campustown; Eppes Professor, 2001, Professor of Biology

Zwilich, Ellen T., MM, Eppes Professor 1999, Professor of Music

Edgar Professors

Taylor, Gary I., PhD, University of Cambridge; **George Matthew Edgar Professor, 2005,** Professor of English

The President and the Provost's Named Professorship Program

Anderson, Thomas L., PhD, Georgia; Jessie Lovano-Kerr Professor of Art Education, 2003

Baer, Howard A., PhD, Wisconsin; J. Daniel Kimel Professor of Physics, 2002

Baumer, Eric, PhD, State University of New York at Albany, Allen E. Liska Professor of Criminology, 2008

Beckham, Joseph C., JD, PhD, Florida; Allan Tucker Professor of Educational Policy Studies and Leadership, 2000, Professor of Educational Leadership

Berg, Bernd A., PhD, Free University of Berlin; Paul A. Dirac Professor of Physics, 2005

Berry, Frances, PhD, Minnesota; Frank Sherwood Professor of Public Administration, 2004

Berry, William D., PhD, Minnesota; Marian D. Irish Professor of Political Science, 1999

Bickley, R. Bruce, Jr., PhD, Duke; Griffith T. Pugh Professor of English, 2002 (Retired)

Bishop, Wendy, PhD, Indiana of Pennsylvania; Kellogg W. Hunt Professor of English, 2000 (Deceased)

Blomberg, Thomas G., D.Crim., Berkeley; Sheldon L. Messinger Professor of Criminology, 2001

Boehrer, Bruce T., PhD, Pennsylvania; Bertram H. Davis Professor of English, 2001

Bowers, Philip L., PhD, Tennessee; Dwight B. Goodner Professor of Mathematics, 2002 and Associate Chair of Mathematics

Bridger, Carolyn A., D.M.A, Iowa; John Boder Professor of Music, 2002 (Retired)

Brooks, James S., PhD, Oregon; Grace C. and Willian G. Moulton Professor of Physics, 2002

Bryant, John L., PhD, Georgia; Orville G. Harrold Professor of Mathematics, 2000, Distinguished Research Professor, 1994–1995 (Retired)

Burnett, William C., PhD, Hawaii; Carl Henry Oppenheimer Professor of Oceanography, 2002

Carroll, Pamela S., EdD, Auburn; Dwight L. Burton Professor of English Education, 2005, Distinguished Teaching Professor, 2005–2006, and Professor of Middle and Secondary Education

Case, Bettye Anne, PhD, Alabama; Olga Larson Professor Of Mathematics, 2003

Chandra, Namas, PhD, Texas A&M; Krishnamurty Karamcheti Professor of Engineering, 2000, and Professor of Mechanical Engineering

Chanton, Jeffrey P., PhD, North Carolina; John Widmer Winchester Professor of Oceanography, 2002, and Professor of Oceanography and Geological Sciences

Charness, Neil H., PhD, Carnegie Mellon; William G. Chase Professor of Psychology, 2005

Chiricos, Theodore G., PhD, Massachusetts, Amherst; William J. Wilson Professor of Criminology and Criminal Justice, 2005

Clarke, Allan J., PhD, Cambridge; Adrian E. Gill Professor of Oceanography, 2001, Distinguished Research Professor, 2000–2001

Cloonan, William J., PhD, North Carolina at Chapel Hill; Richard L. Chapple Professor of Modern Languages and Linguistics, 1999

Coats, Pamela K., PhD, Nebraska at Lincoln; Robert C. Earnest Professor of Finance, 2002

Collins, Emmanuel, PhD, Purdue; Associate Chair and John H. Seely Professor of Mechanical Engineering, 2003

Connerly, Charles E., PhD, Michigan; William G. and Budd Bell Professor of Urban and Regional Planning, 2002, and Chair of Urban and Regional Planning (Retired)

Contreras, Robert J., PhD, Michigan State; James C. Smith Professor of Psychology, 2002, and Director of Neuroscience

Corrigan, John A., PhD, Chicago; Edwin S. Gaustad Professor of Religion, 2000

Cottle, Paul, PhD, Yale; Steve Edwards Professor of Physics 2004

Cross, Timothy A., PhD, Pennsylvania; Earl Frieden Professor of Chemistry and Biochemistry, 2002, Distinguished Research Professor, 2000–2001

Crow, Jack E., PhD, Rochester; John and Geraldine P. Schuler Professor of Physics, 2003 (Deceased 9/3/04)

Dagotto, Elbio R., PhD, Instituto Balseiro; Edward A. Desloge Professor of Physics, 2001, and Scholar/Scientist, School of Computational Science and Information Technology

Dalal, Nar S., PhD, British Columbia; Dirac Professor of Chemistry, 2001, Distinguished Research Professor, 2002–2003, and Chair of Chemistry

Darling, Carol A., PhD, Michigan State; Margaret Rector Sandels Professor of Human Sciences, 1999, Distinguished Teaching Professor, 1996–1997, and Professor of Family and Child Sciences

Darrow, Alice-Ann, PhD, Florida State; Irvin Cooper Professor of Music, 2003

Davis, Lynda J., MFA, Nellie-Bond Dickinson Professor of Dance, 2003

de Grummond, Nancy T., PhD, North Carolina; M. Lynette Thompson Professor of Classics, 1999

Delp, Roy E., MM; Walter S. James Professor of Voice, 2001, Professor of Music (Retired)

Dewar, William K., PhD, Massachusetts Institute of Technology; Pierre Welander Professor of Oceanography, 2001, and Faculty Associate, School of Computational Science and Information Technology

Dorsey, John, PhD, Cincinnati; Katherine Blood Hoffman Professor of Chemistry, 2000

Dresang, Eliza T., PhD, Wisconsin-Madison; Eliza Atkins Gleason Professor of Information Studies, 2003 (Retired)

Driscoll, Marcy P., PhD, Massachusetts; Leslie J. Briggs Professor of Educational Research, 2002, and Chair of Educational Psychology and Learning Systems

Eberstein, Isaac Warren, PhD, Texas at Austin; Charles Meade Grigg Professor of Sociology, 2001, Chair of Sociology, and Research Associate, Center for the Study of Population

Ellington, W. Ross, PhD, Rhode Island; Michael J. Greenberg Professor of Biological Sciences, 2001, and Director, Institute of Molecular Biophysics

Falk, Dean, PhD, Michigan; Hale G. Smith Professor of Anthropology, 2003, Chair and Professor of Anthropology

Feiock, Richard C., PhD, Kansas; Augustus B. Turnbull Professor of Public Administration, 2004

Fenstermaker, John J., PhD, Ohio State; Fred L. Standley Professor of English, 2002, Distinguished Teaching Professor, 2000–2001, Distinguished Research Professor, 2001–2002 (Retired)

Fernandez, Roberto G., PhD, Florida State; Dorothy Lois Breen Hoffman Professor of Modern Languages and Linguistics, 2001

Fiorito, Jack T., PhD, Illinois; J. Frank Dame Professor of Management, 1999

Fisk, Zachary, PhD, California at San Diego; Paul A.M. Dirac Professor of Physics, 1999, National Academy of Sciences

Fleming, Raymond R., PhD, Harvard; John Francis Dugan Professor of Modern Languages and Linguistics, 2005 (Retired)

Freeman, Marc, PhD, West Virginia; Lloyd M. Beidler Professor of Biological Science, 2000, Distinguished Research Professor, 1994–1995 (Retired)

- Fuelberg, Henry**, PhD, Texas A&M; David W. Stuart Professor of Meteorology 2004
- Gellately, Robert J.**, PhD, London; Earl Ray Beck Professor of History
- Geringer, John M.**, PhD, Florida State; Lewis V. Pankaskie Professor of Music, 2001, and Director, Center for Music Research
- Goff, Bryan**, MM; Robert T. Braunagel Professor of Music, 2004 (Retired)
- Goldsmith, Ronald E.**, PhD, Alabama; Richard M. Baker Professor of Marketing, 2001
- Goldstein, Howard**, PhD, Vanderbilt; Donald M. Baer Professor of Communication Sciences and Disorders, 2003, Professor of Communication Disorders
- Gontarski, Stanley E.**, PhD, Ohio State; Sarah Herndon Professor of English, 1999, Distinguished Research Professor, 1999–2000
- Hagopian, Vasken**, PhD, Pennsylvania; Joseph E. Lannutti Professor of Physics, 1999, Distinguished Research Professor, 1997–1998 (Retired)
- Hahn, Cynthia**, PhD, Johns Hopkins; Gulnar K. Bosch Professor of Art History, 2000
- Hardy, Melissa**, PhD, Indiana; Raymond F. Bellamy Professor of Sociology, 2000, and Program Director, Pepper Institute on Aging
- Hawkins, Hunt**, PhD, Stanford; James M. McCrimmon Professor of English, 2003, Professor and Chair of English (Resigned)
- Haymes, Emily M.**, PhD, Pennsylvania State; C. Etta Walters Professor of Exercise Science, 2000, and Professor of Nutrition, Food, and Exercise Sciences (Retired)
- Heald, Gary R.**, PhD, Michigan State; Theodore Clevenger, Jr. Professor of Communication, 2001, and Associate Dean of Communication
- Herrnkind, William F.**, PhD, Miami; Robert K. Godfrey Professor of Biological Science, 2000
- Hirsch, Adam J.**, PhD, JD, Yale; David M. Hoffman Professor of Law, 2002
- Holton, Robert A.**, PhD, Florida State; Matthew Suffness Professor of Chemistry, 2000, Distinguished Research Professor, 1999–2000
- James, Frances C.**, PhD, Arkansas; Pasquale Graziadei Professor of Biological Science, 1999, Distinguished Research Professor, 1995–1996 (Retired)
- Joiner, Thomas**, PhD, Texas at Austin; Bright-Burton Professor of Psychology, 2000
- Jumonville, Neil T.**, PhD, Harvard; William Warren Rogers Professor of History, 1999
- Kacmar, K. Michele**, PhD, Texas A&M; Charles A. Rovetta Professor of Management, 2000
- Kelsay, John**, PhD, Virginia; Richard L. Rubenstein Professor of Religion, 2000, and Chair of Religion
- Kemper, Kirby**, PhD, Indiana; John David Fox Professor of Physics, 2000, Distinguished Research Professor, 1993–1994, Robert O. Lawton Distinguished Professor, 2002–2003, and Chair of Physics
- Kiefer, Douglas W.**, Donald Brittain Professor of Cinematography, 2000, and Associate in Film, School of Motion Picture, Television, and Recording Arts
- Kowalsky, Frank**, D.M.A., Catholic; Joseph A. White Professor of Music, 2000
- Krafft, Marie E.**, PhD, Virginia Polytechnic Institute; Martin A. Schwartz Professor of Chemistry and Biochemistry, 2002
- Krishnamurti, Ruby E.**, PhD, California at Los Angeles; J. Stewart Turner Professor of Oceanography, 2003, Professor of Oceanography, and Research Associate, Geophysical Fluid Dynamics Institute (Retired)
- Kroto, Harold W.**, PhD, University of Sheffield; Francis Eppes Professor of Chemistry, 2004, and Nobel Laureate in Chemistry, 1996 (Deceased)
- Lang, Alan R.**, PhD, Wisconsin; R. Robert Browning Professor of Psychology, 2001
- Lhamon, William T.**, PhD, Indiana; George M. Harper Professor of English, 2000, Distinguished Teaching Professor, 1990–1991 (Retired)
- Loper, David E.**, PhD, Case Western Reserve; George W. DeVore Professor of Geological Sciences, 1999, Distinguished Research Professor, 1991–1992, and Director, Geophysical Fluid Dynamics Institute (Retired)
- MacPherson, David A.**, PhD, Pennsylvania; Abba Lerner Professor of Economics, 1999
- Manousakis, Efstratios**, PhD, Illinois at Urbana-Champaign; Donald Robson Professor of Physics, 2003, Professor of Physics, and Scholar/Scientist, Computational Science and Information Technology
- Marcus, Nancy H.**, PhD, Yale; Mary Sears Professor of Oceanography 2000, Robert O. Lawton Distinguished Professor, 2001–2002
- Marshall, Alan G.**, PhD, Stanford; Kasha Professor of Chemistry, 1999, Distinguished Research Professor, 1998–1999
- Mazza, Nicholas F.**, PhD, Florida State; Patricia V. Vance Professor of Social Work, 2005
- McElrath, Joseph R.**, PhD, South Carolina; William Hudson Rogers Professor of English, 1999 (Retired)
- McKeague, Ian**, PhD, North Carolina; Ralph A. Bradley Professor of Statistics, 2000
- McNeece, C. Aaron**, PhD, Michigan; Walter W. Hudson Professor of Social Work, 2000 (Retired)
- Meighan, Patrick**, MM; Alfred N. Tipton Professor of Music, 2004
- Moffatt, Robert J.**, PhD, Michigan; Georgia Alice Stamford Professor of Exercise Science, 2000, and Chair of Nutrition, Food, and Exercise Sciences
- Muscha, Colleen L.**, MFA, Don Stowell, Jr. Professor of Theatre, 2003
- Nicholson, Sharon E.**, PhD, Wisconsin; Heinz and Katharina Lettau Professor of Climatology, 2001, Distinguished Research Professor, 1997–1998, and Professor of Meteorology
- Nof, Doron**, PhD, Wisconsin; Fridtjof Nansen Professor of Oceanography, 2001, Distinguished Research Professor, 2002–2003
- Nowakowski, Richard**, PhD, Harvard; Randolph L. Rill Professor of Biomedical Sciences, 2009
- Ohlsson, Eric P.**, B.M.Ed., Ohio State; Charles O. DeLaney Professor of Music, 2003
- Ortiz-Taylor, Sheila**, PhD, California at Los Angeles; Francis G. Townsend Professor of English, 2000 (Retired)
- Outlaw, William H., Jr.**, PhD, Georgia; Peter H. Homann Professor of Biological Science, 2001 (Retired)
- Owens, Joseph**, PhD, Tufts; Guenter Schwarz Professor of Physics, 2000, Distinguished Research Professor, 1994–1995
- Peters, Michael**, PhD, Ohio State; Elvin J. Dantin Professor of Engineering, 2000, and Chair of Chemical Engineering
- Pfeffer, Richard L.**, PhD, Massachusetts Institute of Technology; Carl-Gustaf Rossby Professor of Meteorology, 1999, Distinguished Research Professor, 1996–1997 (Retired)
- Pietralunga, Mark F.**, California at Berkeley; Victor Oelschläger Professor of Modern Languages, 2000, and Chair of Modern Languages and Linguistics
- Pohl, Mary E.**, PhD, Harvard; Laura Jepsen Professor of Anthropology, 2003 (Retired)
- Porterfield, Amanda**, PhD, Stanford; Robery A. Spivey Professor of Religion, 2003, Visiting Professor of Religion, College of Arts and Sciences
- Portman, Richard R.**, Gordon Sawyer Professor of Recording Arts, 1999, and Assistant in Film, School of Motion Picture, Television, and Recording Arts
- Prosper, Harrison B.**, PhD, Manchester, Britain; Kirby Kemper Professor of Physics, 2005, Distinguished Research Professor, 2009–2010
- Quine, John R.**, PhD, Michigan; Charles W. McArthur Professor of Mathematics, 2002
- Rasmussen, David**, PhD, Washington; James H. Gapinski Professor of Economics, 2000, Director, DeVoe L. Moore Center for Critical Issues
- Reiser, Robert A.**, PhD, Arizona State; Robert M. Morgan Professor of Instructional Systems, 2003, Professor of Educational Research, Distinguished Teaching Professor, 1999–2000
- Reynolds, John**, PhD, Ohio State; Fraternal Order of Eagles Professor in the Pepper Institute of Aging, College of Social Sciences, 2010
- Rikvold, Per Arne**, PhD, Temple; James Gust Skofronick Professor of Physics, 2003, Professor of Physics and Scholar/Scientist, School of Computational and Information Technology
- Riley, Mark**, PhD, Liverpool; Raymond K. Sheline Professor of Physics, 2000
- Roberts, Thomas M.**, PhD, Notre Dame; Robert B. Short Professor of Biological Science, 2002, and Chair of Biological Science
- Roux, Kenneth H.**, PhD, Tulane; Kurt G. Hofer Professor of Biological Science, 2004, Distinguished Research Professor, 2004–2005, Professor of Biological Science
- Ruhl, John B.**, LL.M., George Washington; J.D., Virginia; Joseph Story Professor of Law, 2001
- Sathe, Shridhar**, PhD, Utah State; D.K. Salunkhe Professor of Food Science, 2001, Distinguished Teaching Professor, 2002–2003, and Professor of Nutrition, Food and Exercise Sciences
- Schlenoff, Joseph**, PhD, Massachusetts, Amherst; Leo Mandelkern Professor of Polymer Science, 2003, Professor of Chemistry and Biochemistry
- Schwartz, Justin**, PhD, Massachusetts Institute of Technology; Jack E. Crow Professor of Engineering, 2004
- Seaton, S. Douglass**, PhD, Columbia; Warren D. Allen Professor of Music, 2002
- Standley, Jayne**, PhD, Florida State; Ella Scoble Opperman Professor of Music, 2000, Distinguished Research Professor, 2003–2004
- Stephan, Friedrich**, PhD, California at Berkeley; Curt P. Richter Professor of Psychology and Neuroscience, 2000
- Stern, Melvin E.**, PhD, Massachusetts Institute of Technology; V.W. Ekman Professor of Oceanography, 1999, Distinguished Research Professor, 1995–1996, National Academy of Sciences (Deceased)
- Tabor, Samuel L.**, PhD, Stanford; Norman P. Heydenburg Professor of Physics, 2003, Distinguished Research Professor, 2001–2002; Professor of Physics
- Tatum, W. Jeffrey**, PhD, Texas; Olivia Nelson Dorman Professor of Classics, 2000, Chair of Classics
- Taylor, Kenneth A.**, PhD, California at Berkeley; Donald L. D. Caspar Professor of Biological Sciences, 2005, Distinguished Research Professor 2001–2002, Professor of Biological Science
- Tenenbaum, Gershon**, PhD, Chicago; Benjamin S. Bloom Professor of Education, 2004
- Thomas, Andre**, D.M.A., Illinois; Owen F. Sellers Professor of Music, 1999
- Torgesen, Joseph**, PhD, Michigan; 1996–1997, Robert M. Gagne Professor of Psychology and Education, 2000 Distinguished Research Professor (Retired)
- Tschinkel, Walter R.**, PhD, California at Berkeley; Margaret Y. Menzel Professor of Biological Science, 1999, Distinguished Research Professor, 2002–2003
- Turner, Robert J.**, PhD, Syracuse; Marie E. Cowart Professor of Epidemiology and

Sociology, 2004, Professor of Sociology (Resigned)

Van Sciver, Steven W., PhD, Washington; John H. Gorrie Professor of Mechanical Engineering, 2005, Distinguished Research Professor, 1996–1997, and Professor of Mechanical Engineering

Von Molnar, Stephan, PhD, California at Riverside; Robert A. Kromhout Professor of Physics, 2001, and Director, Center for Materials Research and Technology

Wagner, Richard K., PhD, Yale; Alfred Binet Professor of Psychology, 1999

Walters, Lori J., PhD, Princeton; Harry F. Williams Professor of French, 2005, Distinguished Research Professor 2001–2002, Professor of Modern Languages and Linguistics

Wang, Hsu-Pin (Ben), PhD, Pennsylvania State; Simon Ostrach Professor of Engineering, 2000, and Chair of Industrial Engineering

Wetherby, Amy, PhD, California at Santa Barbara; Laurel L. Schendel Professor of Communication Disorders, 2000

Whalley, David, PhD, Virginia; E.P. Miles Professor of Computer Science, 2003

Winegardner, Mark D., MFA, Janet G. Burroway Professor of English, 2001

Wise, Sherwood W., PhD, Illinois; Lyman D. Toulmin Professor of Geological Sciences, 2001

Yancey, Kathleen, PhD, Purdue; Kellogg W. Hunt Professor of English, 2005

Young, Marilyn, PhD, Pittsburgh; Wayne C. Minnick Professor of Communication, 2000

Zollar, Jawole Willa Jo, MFA, Florida State; Nancy Smith Fichter Professor of Dance, 1999

Zou, Xiaolei, PhD, Institute of Atmospheric Physics; Jule Charney Professor of Meteorology, 2003

Zwaan, Rolf A., PhD Utrecht, Netherlands; F.C. Donders Professor of Psychology, 2006 (Resigned)

Robert O. Lawton Distinguished Professors

Beidler, Lloyd Mumbauer, PhD, Johns Hopkins; Distinguished Professor 1971–1972, Professor of Biological Science (Retired)

Bradley, Ralph Allan, PhD, North Carolina; Distinguished Professor 1970–1971, Professor and Head of Statistics (Deceased 10/30/01)

Burroway, Janet G., MA, Distinguished Professor 1995–1996, McKenzie Professor, Service Professor of English (Retired)

Chanton, Jeffrey P. PhD, University of North Carolina at Chapel Hill, Distinguished Professor, 2017–2018, Professor of Earth, Ocean & Atmospheric Science (Marine Science)

Choppin, Gregory R. PhD, Texas; Sc.D., Loyola; Distinguished Professor 1967–1968, Professor of Chemistry (Retired)

Cross, Timothy A. PhD, Pennsylvania; Distinguished Professor 2019–2020, Distinguished Research Professor, 2000–2001, Earl Frieden Professor of Chemistry and Biochemistry, 2002

Dalal, Naresh S. PhD, British Columbia; Distinguished Professor 2012–2013, Distinguished Research Professor 2002–2003, Dirac Professor of Chemistry

Fallon, Richard Gordon, MA; Distinguished Professor 1975–1976, Professor and Dean Emeritus, School of Theatre (Retired)

Fichter, Nancy Smith, PhD, Texas Woman's University; Distinguished Professor 1991–1992, Chair and Professor of Dance (Retired)

Floyd, Carlisle, Jr., MM, Distinguished Professor 1964–1965, Professor of Music (Resigned)

Frieden, Earl, PhD, Southern California; Distinguished Professor 1969–1970, Professor of Chemistry (Retired)

Friedmann, E. Imre, PhD, Vienna; Distinguished Professor 1991–1992, Professor of Biological Science (Retired)

Gagne, Robert M., PhD, Brown; Distinguished Professor 1982–1983, Professor of Research, Development, and Foundations (Retired)

Gilmer, Robert, PhD, Louisiana State; Distinguished Professor 1981–1982, Professor of Mathematics (Retired)

Gontarski, Stanley E., PhD, Ohio State; Distinguished Professor 2008–2009, Sarah Herndon Professor of English 1999, Distinguished Research Professor 1999–2000

Greaves, Richard L., PhD, London; Distinguished Professor 1989–1990, Professor of History (Deceased)

Grunwald, Ernest Max, PhD, California; Distinguished Professor 1960–1961, Professor of Chemistry (Resigned)

Gunzburger, Max D., PhD, New York; Distinguished Professor 2015–2016, Professor of Scientific Computing

Harper, George M., PhD, North Carolina; Distinguished Professor 1979–1980, Professor of English (Deceased)

Herz, Werner, PhD, Colorado; Distinguished Professor 1987–1988, Robert O. Lawton Professor of Chemistry (Retired)

Hess, Seymour L., PhD, Chicago; Distinguished Professor 1978–1979, Professor of Meteorology (Deceased)

Hofer, Kurt G., PhD, Vienna; Distinguished Professor 1994–1995, Distinguished Teaching Professor 1989–1990, Professor of Biological Science (Retired)

Hoffman, Dorothy Lois Breen, PhD, Illinois; Distinguished Professor 1963–1964, Professor of Modern Languages and Linguistics (Deceased)

Hollander, Myles, PhD, Stanford; Distinguished Professor, 1998–1999, Distinguished Research Professor, 1995–1996, Professor of Statistics

Housewright, Wiley Lee, EdD, New York; Distinguished Professor 1961–1962, Professor and Dean, School of Music (Retired)

Hunt, Kellogg Wesley, PhD, Iowa; Distinguished Professor 1972–1973, Professor of English (Deceased)

Irish, Marian Doris, PhD, Yale; Distinguished Professor 1958–1959, Professor and Chair of Political Science (Deceased)

Joiner, Thomas E., PhD, Texas at Austin; Distinguished Professor 2010–2011, Distinguished Research Professor 2006–2007, Bright-Burton Professor of Psychology

Kasha, Michael, PhD, California; Distinguished Professor 1962–1963, Professor of Chemistry and Director, Institute of Molecular Biophysics (Deceased)

Kemper, Kirby W., PhD, Indiana; Distinguished Professor, 2002–2003, Chair and Professor of Physics, and John David Fox Professor of Physics, Distinguished Research Professor, 1993–1994 (Retired)

Kenshalo, Daniel Ralph, PhD, Washington; Distinguished Professor 1974–1975, Professor of Psychology (Retired)

Kirby, David K., PhD, Johns Hopkins; Distinguished Professor, 2003–2004, Professor of English, McKenzie Professor, 1989

Krishnamurti, Tiruvalam N., PhD, Chicago; Distinguished Professor 1985–1986, Professor of Meteorology (Retired)

Liddell, Anna Forbes, PhD, North Carolina; Distinguished Professor 1959–1960, Professor of Philosophy (Deceased)

Madsen, Clifford K., PhD, Florida State; Distinguished Professor 1988–1989, Alumni Professor 1985–1988, Distinguished Teaching Professor 1989–1990, Professor of Music (Retired)

Mandelkern, Leo, PhD, Cornell; Distinguished Professor 1984–1985, Professor of Chemistry (Retired)

Marcus, Nancy H., PhD, Yale; Distinguished Professor, 2001–2002, Mary Sears Professor of Oceanography, 2000, and Dean of Graduate Studies

Marshall, Alan George, PhD, Stanford; Distinguished Professor 2006–2007, Distinguished Research Professor, 1998–1999, Kasha Professor of Chemistry 2000

Nichols, Eugene D., PhD, Illinois; Distinguished Professor 1968–1969, Professor and Head of Mathematics Education (Retired)

Nikolaïdi, Elena, Distinguished Professor 1976–1977, Professor of Music (Deceased)

O'Brien, James J., PhD, Texas A&M; Distinguished Professor, 1999–2000, Distinguished Research Professor, 1990–1991, Professor of Meteorology and Oceanography, and Russian Academy of Natural Science (Retired)

Perrewe, Pamela, PhD, University of Nebraska; Distinguished Professor 2018–2019, Haywood and Betty Taylor Eminent Scholar of Business Administration

Proschan, Frank, PhD, Stanford; Distinguished Professor 1984–1985, Professor of Statistics (Retired)

Riley, Mark Anthony, PhD, Liverpool; Distinguished Professor 2014–2015, Raymond K. Sheline Professor of Physics

Robson, Donald, PhD, Melbourne, Australia; Distinguished Professor 1990–1991, Professor of Physics, and Scientist/Scholar, School of Computational Science and Information Technology (Retired)

Rogers, William Hudson, PhD, Virginia; Distinguished Professor 1957–1958, Professor of English, (Deceased)

Rubenstein, Richard Lowell, PhD, Harvard; Distinguished Professor 1977–1978, Professor of Religion (Retired)

Sathe, Shridhar, PhD, Utah State; Distinguished Professor 2013–2014, D.K. Salunkhe Professor of Food Science, 2001, Distinguished Teaching Professor, 2002–2003, and Professor of Nutrition, Food and Exercise Sciences

Savage, I. Richard, PhD, Columbia; Distinguished Professor 1973–1974, Professor of Statistics (Resigned)

Schlenoff, Joseph B., PhD, University of Massachusetts, Amherst, Distinguished Professor, 2016–2017, Professor of Chemistry

Sethuraman, Jayaram, PhD, Indian Statistical Institute; Distinguished Professor 1993–1994, Professor of Statistics

Sheline, Raymond K., PhD, California at Berkeley; Distinguished Professor 1966–1967, Professor of Chemistry and Physics, and Royal Danish Academy of Science and Letters (Retired)

Simberloff, Daniel, PhD, Harvard; Distinguished Professor 1986–1987, Professor of Biological Science (Resigned)

Smith, James C., PhD, Florida State; Distinguished Professor 1992–1993, Distinguished Teaching Professor 1993–1994, Professor of Psychology (Retired)

Standley, Jayne M., PhD, Florida State; Distinguished Professor, 2005–2006, Distinguished Research Professor, 2003–2004, and Ella Scoble Opperman Professor of Music, 2000

Summers, Dewitt L., PhD, Cambridge; Distinguished Professor 1997–1998, Distinguished Research Professor, 1992–1993, and Professor of Mathematics (Retired)

Tam, Christopher K. W., PhD, California Institute of Technology; Distinguished Professor, 2000–2001, Professor of Mathematics and Mechanical Engineering, and

Research Associate, Geophysical Fluid Dynamics Institute, Distinguished Research Professor, 1990–1991

- Taylor, J. Herbert**, PhD, Virginia; Distinguished Professor 1983–1984, Professor of Biological Sciences, and Program Director, Institute of Molecular Biophysics (Deceased)
- Travis, Joseph**, PhD, Duke; Distinguished Professor 1996–1997; Professor of Biological Science
- Tschinkel, Walter R.**, PhD, California at Berkeley; Distinguished Professor 2007–2008, Distinguished Research Professor 2002–2003 and Margaret Y. Menzel Professor of Biological Science 1999
- Wagner, Richard K.**, PhD, Yale; Distinguished Professor 2009–2010, Alfred Binet Professor of Psychology 1999
- Walborsky, Harry M.**, PhD, Ohio State; Distinguished Professor 1980–1981, Professor of Chemistry (Deceased)
- Watts, Betty Monaghan**, PhD, Washington, St. Louis; Distinguished Professor 1965–1966, Professor of Food and Nutrition (Retired)
- Zollar, Jawole Willa Jo**, MFA, Florida State; Distinguished Professor 2011–2012, Professor of Dance

National Academy Of Sciences, Florida State University Members

- Beidler, Lloyd**, PhD, Johns Hopkins; Distinguished Professor 1971–1972, Professor of Biological Science (Deceased)
- Caspar, Donald L.**, PhD, Yale; Professor of Biological Science (Retired)
- Dirac, Paul**, PhD, St Johns College, Cambridge, Professor of Physics (Deceased)
- Fisk, Zachary**, PhD, California at San Diego, Paul A.M. Dirac Professor of Physics, 1999 (Resigned)
- Gor'Kov, Lev P.**, Dr.Sc., Ioffe Physical Technical Institute; Leningrad; Professor of Physics, and Program Director, National High Magnetic Field Laboratory
- Greene, Laura**, PhD, Cornell University; Professor of Physics, National High Magnetic Field Laboratory
- Howard, Louis**, PhD, Princeton; McKenzie Professor 1986, Professor of Mathematics (Resigned)
- Kasha, Michael**, PhD, California at Berkeley; Distinguished Professor 1962–1963, Professor of Chemistry/Institute of Molecular Biophysics (Retired)
- Schrieffer, John R.**, PhD, Illinois; Nobel Laureate in Physics, 1972; Professor of Physics, National High Magnetic Field Laboratory (Retired)
- Stern, Melvin E.**, PhD, Massachusetts Institute of Technology; Distinguished Research Professor, 1995–1996, V.W. Ekman Professor of Oceanography, 1999 (Deceased)
- Taylor, J. Herbert**, PhD, Robert O. Lawton Distinguished Professor 1983–1984, Service Professor of Biological Science (Deceased)
- Lerner, Abba Ptachya**, PhD, London School of Economics; Professor of Economics (Deceased)
- Kroto, Harold W**, PhD, University of Sheffield; Francis Eppes Professor of Chemistry, Nobel Laureate in Chemistry, 1996 (Deceased)

National Academy Of Engineering, Florida State University Members

- Larbaletstier, David C.**, PhD, Imperial College London; Francis Eppes Professor of Superconducting Materials
- Lipo, Thomas**, PhD, University of Wisconsin-Madison
- Ostrach, Simon**, PhD, Brown; Distinguished Professor of Engineering (Resigned)

National Academy of Medicine, Florida State University Members

- Quandagno, Jill**, PhD, Kansas; Distinguished Teaching Professor, 2010–2011, Mildred and Claude Pepper Eminent Scholar in Social Gerontology, 1987, and Professor of Sociology
- Anderson, Norman**, PhD, University of North Carolina, Greensboro, Research Professor of Social Work and Nursing

Institute Of Medicine, Florida State University Members

- Anderson, Norman**, PhD, University of North Carolina, Greensboro, Research Professor of Social Work and Nursing
- Quandagno, Jill**, PhD, Kansas; Distinguished Teaching Professor, 2010–2011, Mildred and Claude Pepper Eminent Scholar in Social Gerontology, 1987, and Professor of Sociology

National Academy of Public Administration

- Berry, Frances**, PhD, University of Minnesota; Frank Sherwood Professor of Public Administration, 2006
- Feiock, Richard**, PhD, University of Kansas; Augustus B. Turnbull Professor of Public Administration; Jerry Collins Eminent Scholar Endowed Chair, 2014
- Weissert, Carol**, PhD, University of North Carolina at Chapel Hill; LeRoy Collins Eminent Scholar of Political Science, 2012
- Bowman, James**, PhD, University of Nebraska, Lincoln, Professor of Public Administration, 2017
- Yang, Kaifeng**, PhD, Rutgers University, Professor of Public Administration, 2012

Foreign Academies, Florida State University Members

- Boyd, Monica**, PhD, Duke; Mildred and Claude Pepper Distinguished Professor of Sociology, and Royal Society of Canada
- O'Brien, James J.**, PhD, Texas A&M; Professor of Meteorology and Oceanography, Robert O. Lawton Distinguished Professor, 1999–2000, Distinguished Research Professor, 1990–1991, and Russian Academy of Natural Science
- Rikvold, Per Arne**, PhD, Temple; James Gust Skofronick Professor of Physics, 2003, Professor of Physics and Scholar/Scientist, School of Computational and Information Technology, and Norwegian Academy of Science and Letters, 2004
- Sheline, Raymond K.**, PhD, California at Berkeley; Service Professor of Chemistry and Physics, Robert O. Lawton Distinguished Professor 1966–1967, and Royal Danish Academy of Science and Letters (Retired)

Nobel Laureates

- Bloch, Konrad E.**, PhD, Columbia, Eminent Scholar in Human Sciences, Nobel Laureate in Medicine, 1964 (Deceased)
- Buchanan, James**, PhD, Chicago, Professor of Economics, Nobel Laureate in Economic Science, 1986 (Deceased)
- Dirac, Paul A.M.**, PhD, St. Johns College, Cambridge, Professor of Physics, Nobel Laureate in Physics, 1933 (Deceased)
- Kroto, Harold W.**, PhD, University of Sheffield; Francis Eppes Professor of Chemistry, Nobel Laureate in Chemistry, 1996 (Deceased)
- Mulliken, Robert S.**, PhD, Chicago, Professor of Chemistry, Nobel Laureate in Chemistry, 1966 (Deceased)
- Schrieffer, J. Robert**, PhD, Illinois, Professor of Physics, Nobel Laureate in Physics, 1972 (Retired)