

Florida State University

2012-2013

General Bulletin
Graduate Edition

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

Upon request, this publication also is available in alternative formats through the Office of Equal Opportunity and Compliance, phone: (850) 645-6519 or e-mail: amwagner@admin.fsu.edu; or the Student Disability Resource Center: phone: (850) 644-9566 or e-mail: sdrc@admin.fsu.edu.

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PRESIDENT'S MESSAGE

One of the nation's elite research universities, Florida State University—with the Carnegie Foundation's highest designation, Doctoral/Research University-Extensive—offers a distinctive academic environment built on our cherished values and unique heritage, uniquely welcoming campus on the oldest continuous site of higher education in Florida, prime location in the heart of the state capital, and championship athletics.

Combining traditional strength in the arts and humanities with recognized leadership in the sciences, Florida State University provides unmatched opportunities for students and faculty through challenging academics, cultural discovery, and community interaction.

Underlying and supporting the educational experience at Florida State University is the development of new generations of citizen leaders, based on the values inscribed in our seal: *Vires, Artes, Mores*—Strength, Skill, and Character.

Florida State's more than 40,000 students are dedicated to academic excellence and providing leadership in our complex world. The University's unique Garnet and Gold Scholar Society program 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.

Our dedication to excellence encompasses many realms. With many of our colleges ranked among the country's finest, we stand firmly in the ranks of the nation's top public universities. Led by a world-renowned faculty that has included six Nobel Laureates and numerous eminent scholars in many areas of the arts and sciences, our academic programs continue to receive major recognition for their quality and overall strength.

Florida State University's 17 colleges offer more than 320 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 University is a national leader in the number of doctorates awarded to African-American students and in the graduation rate of African-American undergraduates. Its College of Medicine and College of Law are ranked among the nation's top schools for Hispanic students.

Florida State University's arts programs — dance, film, music and theatre — rank 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 United States. 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 programs consistently included in the top public university list include physics, chemistry, political science, psychology, criminology, public administration, library science, information, human sciences, business and law.

At the PhD 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 also shines in realms 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 great reputation. Our students supplement their academic pursuits with community-service time outside of the classroom, and each year they record hundreds of thousands of hours of service. In uncountable ways, this 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, and a research agenda that contributes to the nation's economic well-being and quality of life, Florida State University is a 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.

UNIVERSITY CALENDAR

Opening and Closing Dates

	2012
Fall	August 27—December 14
Homecoming	October 27
	2013
Spring	January 7—May 3
Spring Break	March 11—March 15
Summer	2013
12 Week Session (A)	May 13—August 2
First 6 Week Session (B)	May 13—June 21
Second 6 Week Session (C)	June 24—August 2
Second 7 Week Session (D)	June 17—August 2
First 8 Week Session (F—Law)	May 13—July 3

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

Legal Holidays (No Classes)

	2012
Labor Day	Monday, September 3
Veteran's Day	Monday, November 12 (observed)
Thanksgiving Day	Thursday, November 22
Friday after Thanksgiving	Friday, November 23
Christmas Day	Tuesday, December 25
	2013
New Year's Day	Tuesday, January 1
Martin Luther King, Jr. Day	Monday, January 21
Memorial Day	Monday, May 27
Independence Day	Thursday, July 4

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

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

	Fall 2012	Spring 2013	Summer 2013
Undergraduate			
Freshman	January 18	The University does not ordinarily accept freshman applications in the Spring.	January 16
Transfer	July 1	November 1	March 1
Graduate¹	July 1	November 1	March 1
Readmission			
Undergraduate	July 1	November 1	March 1
Graduate ¹	July 1	November 1	March 1
Non-Degree Seeking			
Undergraduate	July 1	November 1	March 1
Graduate	July 1	November 1	March 1
Transient Student			
Undergraduate ²	August 1	December 3	April 1
Graduate	August 1	December 3	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 Tallahassee Community College/Florida State University Cooperative Program and 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. Additionally, the University reserves the right to close earlier if warranted by enrollment limitations.

FALL 2012 ACADEMIC CALENDAR

Note: Dates and times listed below are subject to change. Please refer to http://registrar.fsu.edu/dir_class/fall/acad_cal.htm for the most up-to-date information.

Mar. 2, 2012	Open enrollment for Fall-only and Annual Health Insurance begins.
Mar. 12–Apr. 20, 2012	Registration for currently enrolled and readmitted degree-seeking students. See “Registration Windows” in the <i>Registration Guide</i> .
August 1, 2012	Last day for community college, FSU, and FAMU students to submit Fall 2012 Cooperative Program applications.
Aug. 22, 2012	Residence Halls open at 9:00 a.m.
Aug. 24, 2012	Last day to file for change in residency status.
Aug. 25–30, 2012	Drop/Add , (includes College of Law) 8:00 a.m.–11:59 p.m.
Aug. 26, 2012	New Student Convocation, Civic Center, 1:30 p.m.
Aug. 27, 2012	Classes Begin. Application window opens for Fall Graduation 2012 (visit https://campus.fsu.edu and log on to Secure Apps).
Aug. 27–30, 2012	Late Registration (\$100.00 late registration fee.)
Aug. 30, 2012	Fourth Day of Classes. Last day to Drop/Add and have fees adjusted. Last day to cancel enrollment and have fees removed. Students are liable for all fees for courses still on their schedules at midnight. Last day to add a course without Academic Dean’s permission.
Aug. 31, 2012	Fifth Day of Classes. Registration for state employees (non-FSU employees) using State Employee Fee Waivers (see ‘State Employee Fee Registration’ in “Registration Information” in the <i>Registration Guide</i> for instructions). Last day to request VA deferment from VA representative in Registrar’s Office. Last day to submit waivers or billings.
Sept. 3, 2012	Labor Day. No Classes.
Sept. 4, 2012	Financial aid available via EFT in FSUCard accounts. First day to apply for financial aid deferments and delayed delivery loans. All financial aid students must check their financial aid status at http://www.ais.fsu.edu/finaid .
Sept. 7, 2012	Last day to pay or defer fees for all students, including veterans who are not using a veteran deferment, without a \$100.00 late fee. Veterans should contact a VA representative with questions.
Sept. 14, 2012	Last day to file for Fall 2012 Graduation. (Visit https://campus.fsu.edu and log on to Secure Apps.)
Sept. 15, 2012	Open enrollment for Fall-only and Annual Health Insurance ends.
Sept. 24, 2012	Spring 2013 <i>Registration Guide</i> available. Spring 2013 course listings available on Course Lookup System.
Oct. 12, 2012	End of seventh week of semester. Last day to submit form requesting S/U grading or to change S/U option back to a regular grade. Last day to reduce course load without the permission of Academic Dean. Dean’s permission required to drop below twelve semester hours. Last day to drop a course without receiving a grade. Last day to withdraw without receiving a grade. Last day for doctoral students to take and pass their preliminary examination in order to add or convert dissertation hours for the current semester. Financial Aid Deferments Expire. Fall tuition payment must be received to avoid a late payment fee.
Oct. 15, 2012	Registration for Spring 2013 begins.
Oct. 26, 2012	Homecoming: No classes after 1:10 p.m.
Nov. 1, 2012	Official Thesis/Dissertation manuscript approval deadline, 408 Westcott.
Nov. 6, 2012	Initial Format Submission and Defense Deadline
Nov. 12, 2012	Veterans’ Day Holiday. No Classes.
Nov. 13, 2012	Final Manuscript Submission Deadline.
Nov. 16, 2012	End of 12th week of semester. Deadline for late drop with Dean’s permission.
Nov. 21–23, 2012	Thanksgiving Day Holiday. No classes.
Nov. 23, 2012	Financial Aid Exit Interview for all students with federal loans graduating, transferring, or taking less than six semester hours. (Visit https://campus.fsu.edu and log on to Secure Apps.)
Dec 3, 2012	Last day for community college, FSU, and FAMU students to submit Spring 2013 Cooperative Program applications.
Dec. 7, 2012	Last Day of Classes. Last day to turn in ServScript verification forms. Last day to reduce course load, if permitted, by the Academic Dean. Last day to officially withdraw from the University. Last day to apply for AA Certificate at the Office of Undergraduate Studies, UCA 3400. Veterans’ Deferments Expire. Fall tuition payment must be received to avoid a late payment fee.
Dec. 10–14, 2012	Final Exam Week.
Dec. 14, 2012	Semester Ends. Last day to submit extensions for “incomplete” grades by 4:00 p.m. Commencement, Civic Center, 7:30 p.m.
Dec. 15, 2012	Residence Halls close at noon. Commencement, Civic Center, 9:00 a.m. Diplomas dated this date.
Dec. 18, 2012	Online Grades Due by 4:00 p.m.
Dec. 19, 2012	Grades available online.

UNIVERSITY NOTICES

President's Statement on Equal Opportunity and Non-Discrimination

The Florida State University (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, veterans' or marital status, sexual orientation, gender identity, gender expression, or any other protected group status. This policy applies to faculty, staff, students, visitors, applicants, and contractors in a manner consistent with applicable federal and state laws, regulations, ordinances, orders and rules, 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.

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 or harassment. Behavior that may be considered offensive, demeaning, or degrading to persons or groups will not be tolerated.

The University will continue to reinforce its commitment of non-discrimination to all groups protected by 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 how our campus is reflective of the community we serve.

The University further recognizes that forms of discriminatory or harassing behavior may create an unwelcomed or hostile environment and lead to an uncomfortable situation. 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 or otherwise strive to ensure university-wide compliance, I have appointed Renisha Gibbs, Director, Human Resources/Office of Equal Opportunity and Compliance and University Title IX Coordinator, to develop, administer, and coordinate university-wide initiatives and complaint investigations. This will be accomplished through collaboration with the Dean of Students Department, the Athletics Department, the Office of the Dean of the Faculties, 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@admin.fsu.edu.

Individuals with Disabilities

The 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, *108 Student Services Building*. 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.

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.

The Florida State University Committee on HIV/AIDS 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. In addition, the Florida State University Committee on HIV/AIDS meets as needed to consider special problems related to HIV/AIDS that require University action.

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/AIDS counselors who are available to the University community. These counselors are: Celeste Paquette, M.D., Medical Director, University Health Services, (850) 644-2026; James Hennessey, PhD, Student Counseling, (850) 644-2003; and Dwight Kemp, University Health Services (850) 644-8871. Confidential HIV testing is available for students and staff at University Health Services. Any interested individuals should call (850) 644-8871 to schedule an appointment.

Sexual Harassment Policy

- Policy Statement:** Sexual harassment is a form of discrimination based on a person's gender. Sexual harassment is contrary to the University's values and moral standards, which recognize the dignity and worth of each person, as well as a violation of federal and state laws and University rules and policies. Sexual harassment cannot and will not be tolerated by The Florida State University, whether by faculty, students, or staff or by others while on property owned by or under the control of the University.
- Office of Equal Opportunity and Compliance:** The Office of Equal Opportunity (EOC) is charged with receiving and investigating sexual harassment complaints as set forth in this policy and shall maintain the records pertaining thereto.
- Definition:** Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature directed at an employee or student by another when:
 - Submission to such conduct is made either explicitly or implicitly a term or condition of employment, academic status, receipt of University services, participation in University activities and programs, or affects the measure of a student's academic performance; or
 - Submission to or rejection of such conduct is used as the basis for a decision affecting employment, academic status, receipt of services, participation in University activities and programs, or the measure of a student's academic performance; or
 - Such conduct has the purpose or effect of unreasonably interfering with employment opportunities, work or academic performance or creating an intimidating, hostile, or offensive work or educational environment.
- Examples of Sexual Harassment:** Incidents of sexual harassment may involve persons of different or the same gender. They may involve persons having equal or unequal power, authority or influence. Though romantic and sexual relationships between persons of unequal power do not necessarily constitute sexual harassment, there is an inherent conflict of interest between making sexual overtures and exercising supervisory, educational, or other institutional authority. Decisions affecting an employee's job responsibilities, promotion, pay, benefits, or other terms or conditions of employment, or a student's grades, academic progress, evaluation, student status, recommendations, references, referrals, and opportunities for further study, employment or career advancement, must be made solely on the basis of merit. Examples of sexual harassment include, but are not limited to, the following, when they occur within the circumstances described in Section (3) above:
 - Use of gender-based verbal or written language, including electronic communications offensive or degrading to a person of that gender, whether or not the content is sexual
 - Inappropriate display of gender-based pictorial images offensive or degrading to a person of that gender, including but not limited to sexual posters, photographs, cartoons, drawings, or other displays of sexually suggestive objects or pictures

- c. Use of inappropriate gestures or body language of a sexual nature, including leering or staring at another
- d. Unwelcome requests or demands for sexual favors or unwelcome sexual advances
- e. Inappropriate nonconsensual touching of another's body, including but not limited to kissing, pinching, groping, fondling, or blocking normal movement
- f. Sexual battery (**Note:** Some acts of sexual harassment may also constitute violations of criminal law, e.g., sexual battery, indecent exposure, sexual abuse, etc. In such instances, please refer to the FSU Sexual Battery Policy.)
5. **Disciplinary and Other Actions:** Sexual harassment is prohibited by The Florida State University. The University will take appropriate action against any person found to be in violation of this policy.
Note: A person who has sexually harassed another or retaliated against another may also be subject to civil or criminal liability under state or federal law.
- a. **Disciplinary Actions.** Any employee who has sexually harassed another employee or a student, retaliated against such person for bringing a complaint of sexual harassment, or otherwise violated this policy shall be guilty of misconduct and subject to disciplinary action up to and including dismissal, in accordance with applicable law, rules, policies, and/or collective bargaining agreements. In addition, any student who has sexually harassed another student or an employee, retaliated against such person for bringing a complaint of sexual harassment, or otherwise violated this policy may be subject to disciplinary action up to and including expulsion, pursuant to the Student Code of Conduct. The term "employee" includes all persons employed by the University including faculty and graduate teaching assistants.
- b. **Other Actions.** The University will take such corrective action against any non-students or non-employees found to have violated this policy, as may be appropriate under the circumstances.
6. **Retaliation:** Retaliation against one who in good faith brings a complaint of sexual harassment or who in good faith participates in the investigation of a sexual harassment complaint is prohibited and shall be a violation of this policy and shall constitute misconduct subject to disciplinary or other action as described in Section (5) above.
7. **Filing of False Sexual Harassment Complaint:** Knowingly filing a false sexual harassment complaint is prohibited and shall be a violation of this policy and shall constitute misconduct subject to disciplinary action as described in Section (5) above. A complaint that is investigated and deemed unsubstantiated is not necessarily a false complaint.
8. **Reporting Required:** Any student or employee who has witnessed what is perceived to be a violation of this policy should promptly report that conduct to the EOC, who then will proceed as appropriate. Any supervisor who has witnessed or becomes aware of the alleged occurrence of sexual harassment by, or who receives a complaint of sexual harassment involving a person within that supervisor's purview is required to take prompt corrective action as appropriate, and to report the matter, if possible, within two work days to the EOC. Failure of the supervisor to take appropriate corrective action or to report the incident shall be a violation of this policy and shall constitute misconduct subject to disciplinary action as described in Section (5) above.
Note: For the purposes of this policy, the term "supervisor" shall be deemed to include vice presidents, deans, directors, department chairs, unit heads, supervisors, principal investigators, etc.; faculty when acting in a supervisory capacity or within the faculty-student role; and graduate research assistants, teaching assistants, lab technicians, residence hall coordinators, etc.
9. **Complaint Procedure:**
- a. **Filing of Complaint.** Any student or employee who believes that he or she is a victim of sexual harassment in violation of this policy is encouraged to promptly notify the alleged perpetrator (the "respondent") verbally or in writing that his or her conduct is unwelcome. Such action may cause the unwelcome conduct to cease as well as help to maintain an environment free from sexual harassment. Assistance and support is available from the Office of the Dean of the Faculties (for faculty), the Dean of Students Department (for students), or the Office of Human Resources. Regardless of having given notice to the respondent, the student or employee (the "complainant") may initiate a complaint under this policy by promptly bringing the matter to the attention, preferably in writing by completing the complaint form, of any of the following:
- The Office of Equal Opportunity and Compliance
 - The Office of the Dean of the Faculties
 - The Dean of Students Department
 - The Office of Human Resources
 - A student's school or college dean
 - An employee's immediate or next immediate supervisor
- All complaints should be filed in a timely manner. Complaints filed for acts that occurred more than one year from the filing date of the complaint will generally not be investigated unless appropriate in the judgment of the EOC.
- b. **Preparing a Complaint:** The complainant should provide the following information to facilitate a prompt and thorough investigation:
- The names, addresses, telephone numbers, administrative unit, and position or status of the complainant and the respondent, if known
 - Specific acts alleged, including dates, times, and locations
 - Names, addresses, and phone numbers of potential witnesses
 - The effect the alleged acts have had on the complainant
 - Actions the complainant may have taken to attempt to stop the harassment
 - Complainant's suggestion of proposed action to address or resolve the harassment
 - Other information the complainant believes is relevant
- c. **Transmitting a Complaint to the EOC:** The complaint shall immediately be forwarded to the EOC. If the complaint is verbal, the person receiving the complaint shall make a written summary thereof on the complaint form and request the complainant to sign it.
- d. **Reviewing a Complaint.** The EOC will make an initial determination whether the alleged perpetrator is a student or employee. If the alleged perpetrator is identified as one who is not a student or employee, then the EOC will refer the matter to the Office of the General Counsel for appropriate action. If the EOC determines that the alleged perpetrator is a student or employee, the EOC will review the complaint to determine whether the acts complained of, as stated by the complainant, constitute a violation of this policy, and if not, the complainant will be so informed. If the EOC determines the alleged acts may constitute a violation of this policy, investigation will proceed as set forth in Section (10) below, unless the matter is satisfactorily resolved as in the following paragraph (e).
- e. **Notifying the Respondent and Supervisor; Informally Resolving a Complaint; Withdrawing a Complaint:** The EOC will notify the respondent and his or her appropriate supervisor of the allegations contained in the complaint. In an effort to informally resolve the complaint, the EOC will elicit from the complainant, proposed actions the complainant believes are necessary to address or resolve the alleged harassment. The EOC will discuss these proposed actions with the respondent and with appropriate levels of management. The respective parties will also have the opportunity to propose other means of resolution. Thus, if the matter can be resolved informally, or if the complainant chooses to withdraw the complaint, the complainant will sign a statement outlining the informal resolution and releasing the University from taking any further action. If the matter is not resolved at this stage, the complaint will be investigated as set forth in Section (10) below.
10. **Investigation:** The following procedures will govern all investigations of complaints alleging violations of this policy:
- a. The EOC will thoroughly investigate complaints alleging violations of this policy with the assistance, as needed, of the following: the Office of the Dean of the Faculties, the Office of Human Resources, and/or the respondent's supervisor(s), except in cases where the respondent is a student. If the respondent is a student, the EOC will forward a copy of the complaint and any associated materials to the Dean of Students Department, which will, if appropriate, adjudicate the matter under the Code of Student Conduct. The Dean of Students shall notify the EOC of the outcome.
- b. The investigation should include interviewing the complainant and witnesses suggested by the complainant who may have knowledge of the offending behavior. Employees and students shall fully cooperate in the investigation.
- c. The respondent will be given an opportunity to respond to the complaint verbally and in writing and may suggest additional witnesses.

- d. The investigation should also include interviewing such other witnesses as are deemed appropriate under the circumstances.
 - e. The investigation should include a review of any files and records of previous sexual harassment complaints against the respondent and any other documents deemed relevant.
 - f. All witnesses who provide relevant information should submit a written, signed statement attesting to their knowledge of the subject circumstances.
 - g. Confidentiality of the investigation will be maintained to the extent allowed by law.
11. **Report of EOC:** The EOC will prepare a report setting forth its findings and a determination concerning violation of this policy. The report should be completed within 120 days following the filing of the complaint, where feasible, and will be submitted to the appropriate vice president of the respondent's unit or department.
 12. **Subsequent Action:** The vice president will make a determination upon review of the EOC's report, consultation with the Dean of the Faculties or the Director of Human Resources, and consideration of any other relevant information, including aggravating or mitigating circumstances, whether disciplinary action is warranted under the circumstances. If the vice president determines that disciplinary action should be initiated, then, consistent with due process requirements, the respondent will be notified in accordance with applicable Florida Board of Education and University rules and policies and collective bargaining agreements, and appropriate disciplinary procedures as provided for therein will be followed. Regardless of whether formal disciplinary action is initiated, the University may take such informal corrective action as may be appropriate under the circumstances. The vice president will notify the EOC of the outcome. The EOC will notify the complainant of the results of the investigation and subsequent disciplinary or other corrective action taken, if any, to the extent allowed by law. The EOC will notify the respondent of the results of the investigation when no policy violation is found and no further action planned.
 13. **Distribution of Policy:** Copies of this policy are available to all current and future employees and students at The Florida State University in hard copy (policy brochures, student handbooks, etc.), electronic format (<http://www.auditservices.fsu.edu>, the *General and Graduate Bulletins*), and will be made available in alternative format upon request. Any person involved in the process under this policy needing accommodations for a disability should notify the EOC.
 14. **Applicability:** This policy supersedes any and all prior University policies regarding complaints of alleged acts of sexual harassment.
 15. **Effective Date:** The effective date of this policy is July 1, 1998 as amended December 31, 2002, and January 6, 2004.
 16. **Where to Go for Help:** Any member of the university community may report sexual harassment to The Office of Equal Opportunity and Compliance, 6200 University Center A, (850) 645-6519. Staff is also available in the following offices to assist victims of sexual harassment: A student victim may report to Dean of Students Department, 4322 University Center A, (850) 644-2428; a faculty victim may report to Dean of Faculties, 211 Westcott Building, (850) 644-6876; an A&P, USPS or OPS victim may report to Human Resources, 6200 University Center A, (850) 645-6519.

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

The Florida State University Alcohol Policy

Introduction

The 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, including Alumni Village, 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 Dean of the Faculties, 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 I (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 Dean of the Faculties 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, the Dean of the Faculties 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 Dean of Faculties 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.

- (a) Health Promotion at University Health Services [644-8871; Web site is <http://www.uhs.fsu.edu/hp/>].
- (b) Office of Residence Life [644-2860; Web site is <http://housing.fsu.edu/index.html>].
- (c) FSU Police Department [644-1234; Web site is <http://www.police.fsu.edu/>].
- (d) Volunteer opportunities for students seeking to work toward greater alcohol responsibility are available through KARMA (Knowing About the Responsible Management of Alcohol and other drugs) Peer Educators [644-8871], PAR (Partnership for Alcohol Responsibility) [644-6489] at Thagard Student Health Center and GAMMA (Greeks Advocating the Mature Management of Alcohol).
- (e) 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/>.
- (f) 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].
- (g) SMART (Students Making Alcohol and Other Drug Responsibility Theirs) Choices consists of two, two-hour class sessions and an interactive on-line program at Thagard Student Health Center that presents the legal and personal consequences of substance abuse. Students who are sanctioned by the Office of Student Rights and Responsibilities [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.

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.

- (h) 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>].
- (i) 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>].
- (j) Counseling services are also provided for students, staff, faculty, and the community by the Marriage and Family Therapy clinic, which fees are based on annual income [644-1588; Web site is <http://www.chs.fsu.edu/>].
- (k) 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://www.epls.fsu.edu/hsc>].
- (l) 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>].
- (m) 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>].
- (n) MyStudentBody.com offers personalized and confidential health information [Web site is <http://www.mystudentbody.com>].

The 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.

The 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.

The Florida State University Illicit Drug Penalties

The penalty for possession (second-degree misdemeanor) is 60 days jail and \$500 fine. Penalties for trafficking (first-degree felony) range up to 30 years imprisonment and fines of \$500,000.

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

The 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 Florida State University Security Number (FSUSN).

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 45 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, Florida 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 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. Telephone number (if listed);
 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 de-

partmental 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 10 copies or phonorecords, or 1 or more copyrighted works, with a retail value of more than \$2,500 can be imprisoned for up to 5 years and can be 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 10 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** (http://srr.fsu.edu/conduct_code.html): 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/>)

bmanual/itpolicy.html): 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 more information, please visit **Campus Downloading Frequently Asked Questions** at <http://www.campusdownloading.com/faq.htm>.

Notification to All Applicants for Admission and Students Attending Florida State University

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.

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 fiscal year 2010, Florida State University's faculty generated a record \$215 million in funding to supplement state funds used for research. These external 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.

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. 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 instrumentations.

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. The above research groups, in conjunction with other faculty in engineering and the NHMFL, participate in the **Advanced Materials** faculty cluster. A second faculty cluster, **Integrative NanoScience**, is a collaborative program in materials science involving members of the University's biology, chemistry and biochemistry, engineering, and physics departments. One current focus of this group is the integration of hard and soft materials for future spintronics and biological applications. 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. Florida State University's **Institute for Energy Systems, Economics and Sustainability** is a member of the Florida Energy Systems Consortium. This institute has a broad purview including science and technology, public policy, law, and economics.

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 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. Faculty at the coastal and marine laboratory are playing a major role in research responding to the Deepwater Horizon oil spill. The **Academic Diving Program**, which is part of the laboratory, 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 courses in scientific diving methods.

The **Center for Ocean-Atmospheric Prediction Studies (COAPS)**, located at the Don Fuqua Research Complex, 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. Studies of storm surges, their impacts on the shoreline, the history of coastal storms, shore characteristics, and beach erosion are conducted by the **Beaches and Shores Research Center** for the urgent preservation of Florida's beaches. The center contracts with the Florida Department of Environmental Protection and other agencies to furnish scientific underpinnings for the Florida Coastal Construction Control Line, and to foster good decision-making regarding coastal development, environmental protection, and prudent building practices.

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.

Essential to geologic investigation of Antarctica and global climate change are the analysis and preservation of marine sediments collected on Antarctic research expeditions. The largest collection of southern ocean sediment cores is located at the **Antarctic Marine Geology Research Facility** located at the University. This 40-year old, National Science Foundation-funded facility holds more than ten miles of Antarctic marine sediment cores and is an invaluable resource for scientists both on campus and throughout the world.

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.

Research needs in Florida in the area of human services are accommodated by the **Institute for Social Work Research**. This institute is affiliated with the College of Social Work, but an open-door interdisciplinary approach is encouraged for most of the research funded by external sources.

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 (HPC)** system. The current setup of 526 compute nodes at FSU HPC system was acquired during three different upgrade cycles. The theoretical peak performance of the complete system is 28.7 TeraFlops.

A number of special Florida State University programs have won national or international distinction in 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 in LSI combine strengths in educational leadership, instructional design, human performance, and grants management to design, and 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. Housed within LSI is the Florida **Center for Research in Science, Technology, Engineering and Mathematics**, a unit which focuses in STEM education throughout the nation with a focus on special problems in Florida.

The **Florida Center for Reading Research**, also part of the Learning Systems Institute, 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 **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 multi-faceted 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 to unique capabilities in neutron scattering, high performance computing, and materials science.

INTERNATIONAL EDUCATION

International Commitment

The 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.

Beyond Borders: International Service and Cultural Exchanges

107 South Wildwood, Tallahassee, FL 32306-4240; (850) 644-1702; Web site: <http://ic.fsu.edu>.

Coordinator: Ladanya Ramirez

Beyond Borders is a university-to-university exchange program that provides opportunities for students to engage in intensive, short-term intercultural experiences while performing some community service. Currently, Florida State University has exchanges with the University of Costa Rica, Atlantic Branch (Turrialba, Costa Rica); the University of the West Indies, Mona Campus (Kingston, Jamaica); and the Technical University in Dresden, Germany. Participants live with local families or in university facilities and serve as volunteers in projects organized by the host institutions. All Florida State University students are eligible to apply; groups are limited to ten to twelve students. For additional information, visit <http://www.ic.fsu.edu/> or e-mail bb@admin.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:** Michele E. Ceci; **Assistant Directors:** Ceil P. Bare, Louisa E. Blenman

The 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, music, politics, 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, apparel, and merchandising. In Valencia, courses are offered in Spanish language, literature, and civilization as well as art, business, English literature, humanities, and 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 2- or 4-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 Argentina, Australia, Bahamas, Brazil, China, Costa Rica, Croatia, Czech Republic, Ecuador, France, Israel, Peru, Russia, South Africa, Switzerland, Turkey, and Uruguay. 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, China, and Peru, 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 centers. These students can opt to change their location for the summer term and spend it at any other study center, though visa restrictions apply for some locations. Finally, the College for High School program offers a unique international academic opportunity for outstanding high school students. These students participate in university-level coursework in the Summer semester using Blackboard, and then travel to a host location with faculty and advisers in the summer. The three high school programs currently offered are European Humanities, Intensive Spanish, and Israel Experience. International Programs is constantly adding to and updating the program offerings and locations. For the latest information, visit the Web site at <http://www.international.fsu.edu> or contact us at: *International Programs, A5500 University Center Tallahassee, FL 32306-2420; (850) 644-3272 or (800) 374-8581; inprogl@admin.fsu.edu*.

Florida–Costa Rica Institute

Co-Director: Marianella Jost

Florida State University and Valencia Community College co-administer The Florida–Costa Rica Linkage Institute on behalf of the state’s higher education systems.

The Florida–Costa Rica Linkage Institute (FLORICA) is one of the three original linkage institutes established by the Florida Legislature in 1986. The International Linkage Institute Program has expanded since that time to include a total of eleven institutes throughout the state. The intent of the Florida Legislature is for the Florida–Costa Rica Linkage Institute to offer opportunities at both the university and community-college levels for education and training; state development; curriculum development; collaborative research; technical assistance; cultural, faculty, and student exchange; intensive Spanish instruction; library materials exchange; computer linkage; and joint commercial ventures. These activities are to be undertaken in conjunction with Costa Rica’s four public universities, its Ministry of Education, and the State of Florida’s eleven state universities and twenty-eight community colleges.

Florida–France Institute

Co-Director: Kyle Rausch

The University of South Florida, Florida State University, and Miami-Dade Community College co-administer the Florida–France Linkage Institute on behalf of the state’s higher education system.

The Florida–France Institute was established in 1989 and is one of eleven Florida bi-national linkage institutes created by the Florida Legislature to promote business, educational, cultural, and scientific exchange among Florida and other nations and regions of the world. France is a major trading partner with Florida and has growing business and investment interests in the state. Similarly, Florida seeks new opportunities for business in France, especially with its sister region Languedoc-Roussillon and the French Caribbean.

The intent of the Florida–France Institute is to serve a multitude of interest groups in Florida and France by providing opportunities for education, training, and activities related to trade and business promotion, cooperative research, and mutual technical assistance, as well as educational and cultural exchange. Its purpose is to link the resources of the state of Florida’s eleven universities and twenty-eight community colleges with those of state governments and business to forge a network of partnerships with French educational, governmental, and private-sector institutions.

Law Program at Oxford University

Florida State University conducts an international law program in the prestigious academic atmosphere of Oxford University. 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 adjunct professors from Oxford University. 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 http://www.law.fsu.edu/academic_programs/international_law/oxford/index.html.

Center for Global Engagement

Please see the “Student Services” chapter of this *General Bulletin* for information pertaining to the Center for Global Engagement.

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://appliedstudies.pc.fsu.edu/>

Regular Degree Program

Recreation, Tourism, and Events	B
Public Safety and Security	B

Certificate Programs

Certificate in Event Management, Graduate
 Certificate in Underwater Crime Scene Investigation, Undergraduate/Graduate

College of Arts and Sciences:

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

Regular Degree Programs

Actuarial Science	B		
American and Florida Studies	B	M	
Anthropology	B	M	D
Biochemistry	B		
Biological Sciences	B	M	D
Biostatistics		M	D
Chemical Physics		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	
East Asian Languages and Culture	B		
English	B	M	D
Environmental Science	B		
Environmental Science and Policy	B		
French	B	M	D
French and Francophone Studies	B		
Geology	B	M	D
Geophysical Fluid Dynamics			D
German	B	M	
Greek	B	M	
History	B	M	D
History and Philosophy of Science		M	
Humanities	B	M	D
Italian	B		
Italian Studies		M	
Latin	B	M	
Materials Science		M ⁴	D
Mathematics	B	M	D
Meteorology	B	M	D
Middle Eastern Studies	B		
Molecular Biophysics			D
Neuroscience			D
Oceanography		M	D
Philosophy	B	M	D
Physical Science	B		
Physics	B	M	D
Psychology	B	M	D
Religion	B	M	D
Russian	B		
Science Teaching		M	

Slavic		M	
Spanish	B	M	D
Statistics	B	M	D

Combined Degree Programs

Computer Science	BS/MS
History	BA/MA
Mathematics	BS/MS
Philosophy	BA/MA
Statistics	BS/MS

Certificate Programs

Certificate in Cognitive Science (Psychology), Graduate
 Certificate in Critical Theory (English), Graduate, Interdisciplinary
 Certificate in Publishing and Editing (English), Graduate
 Certificate in Global Pathways, Undergraduate/Graduate, Interdisciplinary
 Certificate in Information Systems Security Professionals, Undergraduate/Graduate
 Certificate in Marine Biology and Living Resource Ecology, Undergraduate
 Certificate in Museum Studies: Graduate (Anthropology, Classics, History, or History and Philosophy of Science)
 Certificate in Oceanography, Graduate
 Certificate in SAS Programming and Data Analysis (Statistics), Undergraduate/Graduate

College of Business:

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

Regular Degree Programs

Accounting	B	M	
Business Administration	B	M	D
Business Administration/Social Work		M ²	
Finance	B	M	
Hospitality Management	B		
Management	B	M	
Management Information Systems	B	M	
Marketing	B	M	
Multinational Business	B		
Real Estate	B		
Risk Management/Insurance	B		

Combined Degree Program

Marketing	BS/MS
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Certificate Programs

Certificate in Entrepreneurship, Undergraduate
 Certificate in Free Enterprise and Ethics, Undergraduate

College of Communication and Information:

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

Regular Degree Programs

Communication	B	M		D
Communication Sciences and Disorders	B	M	A	D
Information Technology	B			
Library and Information Studies		M		S D

Combined Degree Program

Communication	BS/MS
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Joint Degree Program

Library Information Studies and Law	MS/JD
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Certificate Programs

Certificate in Communication Sciences and Disorders, Undergraduate Honors/Graduate
 Certificate in Developmental Disabilities³, Undergraduate, Interdepartmental
 Certificate in Digital Video Production, Graduate
 Certificate in Global Pathways, Undergraduate/Graduate, Interdisciplinary
 Certificate in Health Information Technology, Undergraduate
 Certificate in Information Architecture, Graduate
 Certificate in Intercultural Competence, Undergraduate
 Certificate in Library Leadership and Management, Graduate
 Certificate in Multicultural Marketing Communication, Undergraduate/Graduate
 Certificate in Museum Studies: Information Studies, Graduate
 Certificate in Project Management, Graduate
 Certificate in Reference Services, Graduate
 Certificate in School Library Media Specialist Leadership, Graduate
 Certificate in Web Design, Graduate
 Certificate in Youth Services, Graduate

College of Criminology and Criminal Justice:

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

Regular Degree Programs

Computer Criminology	B	M	
Criminology	B	M	D
Criminology/Public Administration		M ²	
Criminology/Social Work		M ²	

Combined Degree Program

Criminology and Criminal Justice	BS/MS
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Certificate Program

Certificate in Criminology and Criminal Justice, Undergraduate through Distance Learning

College of Education:

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

Regular Degree Programs

Counseling and Human Systems		M	S	
Counseling Psychology and Human Systems				D
Early Childhood Education	B	M	S	D
Educational Leadership and Policy		M	S	D
Educational Psychology		M	S	D
Elementary Education	B	M	S	D
English Education	B	M	S	D
Foundations of Education		M	S	D
Higher Education		M	S	D
Instructional Systems		M		D
Mathematics Education		M		
Measurement and Statistics		M	S	D
Multilingual/Multicultural Education		M		
Reading Education		M		D
Research and Evaluation Methods		M		D
Social Sciences Education	B	M		
Special Education	B	M	S	D
Sport Management	B	M		D
Visual Disabilities	B	M		

Combined Degree Program

Exceptional Student Education	BS/MS
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Joint Degree Program

Law and Sport Management	JD/MS
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Certificate Programs

Certificate in Coaching, Graduate
 Certificate in Blended Online Learning and Teaching (BOLT), Graduate
 Certificate in Developmental Disabilities³, Undergraduate, Interdepartmental
 Certificate in Early Childhood and Family Intervention, Graduate
 Certificate in Early Childhood/Special Education, Graduate
 Certificate in Educational Leadership - Modified Program, Graduate
 Certificate in Educational Policy, Graduate
 Certificate in Human Performance Technology, Graduate
 Certificate in Infant/Toddler Development, 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 Program Evaluation, Graduate
 Certificate in Teaching English to Speakers of Other Languages, Graduate
 DOE-Approved Professional Training Option (PTO), Undergraduate/Graduate

FAMU-FSU College of Engineering:

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

Regular Degree Programs

Biomedical Engineering		M	D
Chemical Engineering	B	M	D
Civil Engineering	B	M	D
Computer Engineering	B		
Electrical Engineering	B	M	D
Industrial Engineering	B	M	D
Materials Science		M ⁴	
Mechanical Engineering	B	M	D

Combined Degree Program

Electrical Engineering	BS/MS
Mechanical Engineering	BS/MS

Certificate Programs

Certificate in Water and Environmental Resources Engineering, Graduate
 Renewable Energy Systems, Undergraduate/Graduate

The Graduate School**Regular Degree Programs**

Materials Science	M ⁴	
Materials Science and Engineering		D

Certificate Program

Certificate in Preparing Future Faculty, Graduate
 Certificate in Preparing Future Professionals, Graduate

College of Human Sciences:

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

Regular Degree Programs

Athletic Training	B		
Clothing, Textiles, and Merchandising	B	M	
Exercise Science	B	M	D
Family and Child Sciences	B	M	D
Food and Nutrition	B	M	D
Marriage and Family Therapy			D

Certificate Programs

Certificate in Family Studies, Graduate
 Certificate in Retail Merchandising, Graduate

Joint Degree Program

Family Child Sciences and Law	MS/JD
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College of Law:

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

Regular Degree Programs

American Law for Foreign Lawyers	M	
Environmental Law and Policy	M	
Law		JD

Joint Degree Programs

Business and Law	MBA/JD
Economics and Law	MS/JD
Family and Child Sciences and Law	MS/JD
International Affairs and Law	MS/JD
Information Studies 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

Professional Certificate in Business Law, Graduate
 Professional Certificate in Environmental, Natural Resources, and Land Use Law, Graduate
 Professional Certificate in International Law, Graduate

College of Medicine:

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

Regular Degree Programs

Biomedical Sciences	M	D
Medicine		MD

College of Motion Picture Arts:

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

Regular Degree Program

Motion Picture Arts	B	M
Motion Picture Arts Writing		M

College of Music:

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

Regular Degree Programs

Arts Administration		M ¹	
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	

Certificate Programs

Certificate in Arts Administration, Graduate
 Certificate in College Teaching, Graduate
 Certificate in Early Music, Graduate
 Certificate in Jazz Studies, Undergraduate/Graduate

Certificate in Music Education and Leadership, Graduate
 Certificate in Music of the Americas, Graduate
 Certificate in Music, Undergraduate Honors
 Certificate in Pedagogy of Music Theory, Graduate
 Certificate in Performance, Undergraduate
 Certificate in Piano Pedagogy, Undergraduate/Graduate
 Certificate in Sacred Music, Undergraduate/Graduate Vocal or Instrumental
 Certificate in Special Music Education, Undergraduate/Graduate
 Certificate in World Music, Graduate

College of Nursing:

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

Regular Degree Program

Nursing	B	M	D
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Certificate Programs

Certificate in Nursing Education, Graduate
 Certificate in Nursing Leadership, Graduate
 Post-Graduate Certificate with Preparation as a Clinical Nurse Leader

College of Social Sciences and Public Policy:

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

Regular Degree Programs

African-American Studies	B		
Asian Studies	B	M	
Asian Studies/ Business	B		
Demography		M	
Economics	B	M	D
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 Administration/ Law		M ²	
Public Administration/ Social Work		M ²	
Public Administration/Criminology		M ²	
Public Administration/Urban and Regional Planning		M ²	
Public Health		M	
Russian and East European Studies	B	M	
Social Science	B	M	
Sociology	B	M	D
Urban and Regional Planning		M	D
Urban and Regional Planning/Demography		M ²	
Urban and Regional Planning/International Affairs		M ²	
Urban and Regional Planning/Law		M ²	
Urban and Regional Planning/Public Administration		M ²	
Urban and Regional Planning/ Public Health		M ²	

Combined Degree Program

Master of Public Administration	BA or BS/MPA ⁵
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Certificate Programs

Certificate in African-American Studies, Undergraduate
 Certificate in Collaboration and Dispute Resolution, Graduate
 Certificate in Demography, Undergraduate
 Certificate in Emergency Management, Undergraduate/Graduate
 Certificate in Florida City and County Management, Graduate
 Certificate in Global Pathways, Undergraduate/Graduate, Interdisciplinary
 Certificate in Health Services Administration and Policy, Graduate
 Certificate in Human Resource Management, Graduate
 Certificate in Latin American and Caribbean Studies, Graduate
 Certificate in Markets and Institutions, Undergraduate
 Certificate in Online Geographic Information Systems, Graduate
 Certificate in Political Economy, Undergraduate
 Certificate in Political Science, Research Intensive, Undergraduate

Certificate in Public Administration, Undergraduate/Graduate
 Certificate in Public Financial Management, Graduate
 Certificate in Real Estate Development, Graduate
 Certificate in Urban and Regional Planning, Undergraduate
 Certificate in Urban Design, Graduate

College of Social Work:

<http://csw.fsu.edu>

Regular Degree Programs

Social Work	B	M	D
Social Work/Business Administration		M ²	
Social Work/Criminology		M ²	
Social Work/Law		M ²	
Social Work/Public Administration		M ²	

Certificate Programs

Certificate in Arts and Community Practice, Undergraduate/Graduate
 Certificate in Child Welfare Practice, Undergraduate/Graduate
 Certificate in Family Social Work Practice, Graduate
 Certificate in Gerontology, Undergraduate/Graduate
 Certificate in Leadership in Executive and Administrative Development in Social Work, Graduate
 Certificate in Social Work in Disaster Recovery, Graduate

Undergraduate Studies, Division of

Certificate Program

Associate in Arts Certificate, Undergraduate

College of Visual Arts, Theatre, and Dance:

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

Regular Degree Programs

American Dance Studies		M		
Art Education		M	S	D
Art Therapy		M ¹		
Arts Administration		M ¹		
Dance	B	M		
Graphic Design	B			
History and Criticism of Art	B	M		D
Interior Design	B	M		
Studio Art	B	M		
Theatre	B	M		D

Certificate Programs

Certificate in Art Museum Education, Graduate
 Certificate in Arts and Community Practice: Art Education, Undergraduate/Graduate
 Certificate in Arts and Community Practice: Dance, Undergraduate/Graduate
 Certificate in FSU Theatre Academy in London, Undergraduate
 Certificate in Global Pathways, Undergraduate/Graduate, Interdisciplinary
 Certificate in Museum Studies: Art Education, Graduate
 Certificate in Museum Studies: Art History, Graduate
 Certificate in Museum Studies: Art, Graduate
 Certificate in Museum Studies: Dance, Graduate
 Certificate in Museum Studies: Interior Design, Graduate
 Certificate in Museum Studies: Theatre, Graduate
 Certificate in Theatre Administration and Management, Graduate

Interdisciplinary Programs

Regular Degree Programs

African American Studies	B		
American and Florida Studies	B	M	
Asian Studies	B	M	
Humanities	B	M	D
International Affairs	B	M	
Latin-American and Caribbean Studies	B		
Materials Science		M ⁴	
Materials Science and Engineering			D
Physical Science	B		
Public Health		M	
Russian and East European Studies	B	M	
Social Science	B	M	

¹ Offered jointly by the College of Music and by the College of Visual Arts, Theatre, and Dance

² Dual degree program

³ Offered jointly by the College of Arts and Sciences, by the College of Communication and Information, and by the College of Education

⁴ Offered jointly by the College of Arts and Sciences, by the FAMU-FSU College of Engineering, and by the Graduate School

⁵ Open to qualified students in any undergraduate major who are accepted into the combined degree program.

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: Mary B. Coburn

Associate Vice President for Student Affairs: Eric Weldy

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

Career Center

Center for Academic Retention and Enhancement (CARE)

Center for Global Engagement

Center for Leadership & Civic Education

Center for Multicultural Affairs

Dean of Students Department

Greek Life

New Student and Family Programs

Student Disability Resource Center

Student Rights and Responsibilities

Victim Advocate Program

Withdrawal Services

Oglesby Union

Art Center

Askew Student Life Center

Crenshaw Lanes

FSU Flying High Circus

Guest Services

Oglesby Gallery

Student Activities Center

Union Board

Union Productions

Student Government Association

Radio and Television

University Counseling Center

University Health Services

University Housing and Child Development 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

Parking and Bus Services

Bicycle Parking

FSU Police Department

Seminole Dining

StudentsFirst

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

The Campus Recreation Department encourages students, faculty, and staff to be involved in recreational sports through its intramural, extramural, aquatic, fitness, challenge ropes, and outdoor pursuits programs. On-campus

recreational facilities are located primarily in the **Bobby E. Leach Recreation Center**. The center offers basketball, racquetball and squash courts; a swimming complex; a jogging track; whirlpools and sauna; as well as a health bar. Several weight-training and multipurpose fitness rooms are furnished with state-of-the-art equipment. The **Fitness Program** offers personal training and wellness services and group exercise classes to patrons. Recreational swimming, water safety, and other first-aid and safety non-credit courses are offered year around at the Leach pool. Nearby, students have access to intramural fields, an outdoor track, and tennis courts. The award-winning **Rec SportsPlex** intramural facility on Tyson Road provides over 104 acres of outdoor sports fields and green space. For complete information on all Campus Recreation offerings, see <http://fsu.campusrec.com>.

The **FSU Reservation**, a seventy-three-acre lakefront recreational facility, is located within five miles of the main campus. Here students may swim, picnic, and kayak. Students may rent sailboats, kayaks, or canoes and take lessons offered throughout the year. A challenge ropes course is provided for team building and leadership training. The Reservation has a conference center and limited overnight space available for meetings and retreats for faculty, staff, and students.

Through **Outdoor Pursuits**, students can snow ski, camp, canoe, white water raft, or be otherwise active in the outdoors. Trips, scheduled throughout the year, are open to students and the community.

The **Intramural (IM) Sports Program** provides opportunities for participation in over forty sports leagues, tournaments, and events annually. Separate divisions for various ability levels keep competition fair and fun. Coed programs and recreational divisions are designed for those who enjoy sport as a social activity. Intramural activities are offered at the Main Campus Fields and the Rec SportsPlex outdoor facilities and inside Tully Gym. The program also hires students to officiate and to supervise intramural games.

Extramural sport clubs, more highly structured than intramural teams, compete with clubs from other universities. See <http://fsu.campusrec.com/sport-clubs> for a list of clubs.

Career Center

The Career Center provides individualized career services to Florida State University students and alumni. The Career Center includes a library offering over 3,000 information resources, private career advising areas, as well as mock interviewing and on-campus recruiting facilities. Career advisers and other staff assist students with a variety of issues, including choosing majors, researching occupations and employers, exploring postgraduate study, and developing job search strategies. No appointment is necessary to speak with a career adviser.

Students can work toward their career goals by using a variety of Career Center tools and services. For students who would like to develop their career planning skills, the Career Center offers SDS 3340, Introduction to Career Development (1-3 credit hours). Those students needing career-related work experience can find internships, cooperative education, part-time/summer jobs, externships, and volunteer opportunities through SeminoleLink, an on-line jobs database and other Career Center library resources. Students seeking full-time work can use SeminoleLink or attend one of several career expositions to network and apply for positions with hundreds of employers nationwide. During the Fall and Spring semesters, students can even interview on campus for internships, co-ops, or full-time positions with employers.

Students in all academic disciplines are encouraged to use the FSU ePortfolio system to document their experiences and skills. Information saved in the portfolio can be used for job or graduate school applications and during interviews. FSU Students and alumni can also use *Resumé Builder*, available on SeminoleLink, to assist them in creating eye-catching resumé. The Career Center also offers customized mock interviews, allowing students to practice and improve their interviewing performance. Finally, Career Center staff provide workshops covering a variety of topics, such as job searching, writing resumé and cover letters, interviewing, going to graduate school, and more.

The Career Center is located in the Dunlap Student Success Center at the corner of Woodward Avenue and Traditions Way. Our general hours are 8:00 a.m. to 5:00 p.m., Monday through Friday. Drop-in career advising is also available Monday through Friday 9:00 a.m. to 4:30 p.m. and on some Tuesday evenings until 8:00 p.m. during the Fall and Spring semesters. For specific career advising hours or answers to other questions, please 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 economically, educationally, or culturally disadvantaged students who have the potential to do college level work.

CARE administers a high-school-to-college **Summer Bridge Program** to encourage college success. Florida State University's pre-collegiate programs, including the **Upward Bound Program** and the **College Reach Out Program** are administered through the Center as well. **CARE** introduces students to the responsibilities and opportunities of college life, encourages the development of useful study habits, and assists students in recognizing their potential for success. The Center provides a caring environment for students to discuss their academic, personal, and/or social concerns with a friendly, supportive staff.

Pre-Collegiate Programs

The following pre-collegiate programs are provided by the University: **College Reach Out Program**, **University Experience Program**, and **Upward Bound Program**.

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

Leadership and Community Service

At Florida State University, leadership, community involvement, and civic responsibility are integral elements of a liberal arts education. The **Center for Leadership & Civic Education** enhances the education of students for responsible citizenship and effective leadership. The Center offers over twenty-five programs that students can choose from which include: service opportunities, leadership development, and social justice education.

Students are welcome to schedule a meeting with an adviser. **ServScript** allows students to enhance their official academic transcript by documenting their service hours online. The Center is home to **Youth Programs** and **Jumpstart** where FSU mentors can train to work with youth from preschool to high school. The Center also coordinates weekly, student-led **Community Outreach Projects** that serve area nonprofit agencies. The Center also houses several student leadership and service organizations.

Florida State University and the Center for Leadership & Civic Education host several statewide programs that promote student involvement in community service and civic responsibility in education. Statewide initiatives include the **Florida Campus Compact** and **VISTA**.

The Center is the home of the **Social Justice Living-Learning Community (SJLLC)** located in Wildwood Hall. The SJLLC is designed for freshmen of all majors who desire to understand and practice social justice. The **Service Leadership Seminar** is another opportunity for incoming freshmen. This seminar provides an opportunity to learn about community service and leadership at FSU. **LEAD Plans** are designed to develop Leaders Educated to make A Difference. As a result of completing a LEAD Plan, FSU students understand the FSU leadership learning philosophy and resources of the Center. The Center also has an eighteen credit hour **Certificate in Leadership Studies**—an undergraduate program that is interdisciplinary, multidimensional, experiential and multicultural. The certificate is offered through the Center and the Department of Educational Leadership and Policy Studies. Completion of the certificate will be acknowledged on recipient's academic transcript.

Lead-Ins at the Rez are overnight retreat style leadership learning experiences hosted by the Center for Leadership & Civic Education. These sessions focus on the development of leadership knowledge, skills, and values, through the four contexts of individuals, partnerships, groups, and communities. The Center also hosts **LeaderShape**, which occurs annually the first week of May. Students can also get involved in the **Noles Leadership Book Club** and learn more about leadership and service.

The University also recognizes outstanding service to the community through the **President's Humanitarian of the Year Award**. In addition, students are recognized for their service through the **Profiles of Service Award**, the **Service Scholar Program**, and the **Rosenbloom Scholarship**.

For more information, contact The Center for Leadership & Civic Education, Division of Student Affairs, *Dunlap Student Success Center*, 100 S. Woodward Avenue, Tallahassee, FL 32306; (850) 644-3342; Fax (850) 644-3362; Web site: <http://www.thecenter.fsu.edu>; e-mail: thecenter@admin.fsu.edu.

Dean of Students Department

The primary focus of the **Dean of Students Department** is to support the academic mission of Florida State University and the Division of Student Affairs by providing services, programs, resources, and advocacy for the needs and interests of all students. This includes advocacy for students reporting alleged

sexual harassment and students in crisis. Staff members provide educational opportunities for students to develop their values, decision-making skills, and leadership capabilities. For more information, contact Dean of Students Department at 4100 UCA, call (850) 644-2428 or (850) 644-8504 (TDD), or visit <http://www.deanofstudents.fsu.edu>.

The **Student Disability Resource Center (SDRC)** is the primary advocate for students with disabilities and a resource site for the University community on disability-related issues. The SDRC also provides academic support services such as extra time on exams, readers, note-takers, alternate texts, and sign language interpreters. The SDRC provides on-campus transportation for persons with mobility impairments and maintains the **Theodore and Vivian Johnson Adaptive Technology Lab**, a facility that houses computers and adaptive equipment that help students with disabilities successfully meet the requirements of their academic programs. Any student in need of specific services and reasonable accommodation should contact the Student Disability Resource Center, 108 Student Services Building, or call (850) 644-9566 or (850) 644-8504 (TDD), or visit <http://www.disabilitycenter.fsu.edu>.

All new undergraduate students are required to attend an orientation, advisement, and registration session coordinated by the Dean of Students Departments' Office of New Student & Family Programs. During orientation, students are given essential information: the University's policies and procedures, community values and standards, and academic requirements and opportunities. Students also receive practical advice on consumer survival: where to buy books, open checking accounts, or meet other students with similar interests.

In addition to meeting faculty and administrators, students are assigned to small groups led by trained staff, comprised of currently enrolled students, who inform and guide the newcomers. Students must meet with their academic advisers before registering for classes. Students may not register for their first term on campus until they have completed an orientation session. Although they may be admitted up to a year before they enter, students may only attend orientation immediately prior to their enrollment. New Student & Family Programs provides sessions preceding each academic term.

Orientation sessions include a concurrent session for family members. During these sessions family members learn about the University, its services and academic programs, and meet with administrators and faculty. Family members and students share tours of residence halls and visit booths set up in a fair-like atmosphere.

All admitted undergraduate students receive by mail information and instructions about registering for orientation. Attendance is by reservation only, and participants must pay a nonrefundable fee. For more information, please visit <http://www.nsf.fsu.edu>.

The **Office of Greek Life** advises and advocates for thirty-one fraternities, twenty-six sororities. These fifty-seven organizations are divided into the following governing councils: twenty-three chapters of the Interfraternity Council (IFC), eleven chapters of the Multicultural Greek Council (MGC), seven chapters of the National Pan-Hellenic Council (NPHC), and sixteen 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, service, and social development. These organizations have been an integral part of the holistic education and development of students since 1904. For information call (850) 644-9574, or visit <http://www.greeklife.fsu.edu>.

The **Office of Student Rights and Responsibilities** administers student disciplinary procedures in accordance with the Student Conduct Code and maintains official disciplinary 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 judicial procedures, call (850) 644-5136, or visit <http://www.srr.fsu.edu>.

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 crisis. The Withdrawal staff explains the withdrawal application process and its various stages, evaluates fee and 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. After meeting with the Withdrawal Services staff, students should expect to spend time in discussion with their Academic Dean about the implications of withdrawing, the viability of their withdrawal application, and any alternative academic options that may exist. Academic Deans and their staff possess the authority to decide and approve student withdrawals from a semester of enrollment. For more information call (850) 644-1741 or <http://withdrawal.fsu.edu>.

Staff of the **FSU Victim Advocate Program** provide advocacy to victims of crime. An advocate is on-call twenty-four hours a day when school is in session to respond to those Florida State University students who are victimized, and to any person victimized on Florida State University campus. The services offered include emotional support, court accompaniment and crisis intervention, instructor notification, referral to counseling services, and educational programming for the campus community. For information call (850) 644-7161 or (850) 644-2277, or visit <http://www.victimadvocate.fsu.edu>. After hours, call (850) 644-1234 and ask for an advocate.

Center for Global Engagement (CGE)

The Mission of the Center for Global Engagement (formerly the International Center) is to facilitate international diversity and foster global understanding and awareness within the FSU community.

The CGE plays a key role in internalization initiatives of Florida State through intercultural programs; courses; training and assessing; cross-cultural exchanges; and immigration services for students, faculty, and staff.

Located at 110 South Woodward St., P.O. Box 3064216, Tallahassee, FL, 32306-4216, the Center for Global Engagement is open weekdays from 8:00 a.m. to 5:00 p.m. and can be reached by phone: (850) 644-1702, fax: (850) 644-9951, e-mail: cge@admin.fsu.edu, or online: <http://cge.fsu.edu>.

Student Government

The **Student Government Association (SGA)** is the student's voice at Florida State University. SGA allocates approximately \$13 million of activity and service fees. These funds support the Leach Center, Oglesby Union, activities of the student senate, the executive branch, student government agencies, and numerous student organizations and university units. Elected and appointed officials enjoy many opportunities to acquire leadership and administrative skills and to serve their fellow students and the university. For more information, call (850) 644-1811 or stop by 205 Oglesby Union.

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, including a computer lab for students. For further information, call (850) 644-7166 or stop by 242 SLB.

The **Student Government Association** funds or partially funds the Oglesby Union, Campus Recreation, COGS, homecoming, the SGA lecture series, the Asian-American Student Union, the Black Student Union, the Center for Participant Education, the Hispanic/Latino Student Union, the Institute for Conservative Studies, the Institute for Liberal Studies, the Inter-Residence Hall Council, the Jewish Student Union, Pride, the Women's Center, Service Corps, Alumni Village Childcare, the Environmental Service Program, First Responders, Men Advocating Responsible Conduct (MARC), SAFE (escort service), the SGA Publications Office, WVFS V-89 (student-run radio station), and hundreds of student organizations. For more information on these offices or services, please come by 205 Oglesby Union or visit our Web site, at <http://www.sga.fsu.edu>.

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

The **Oglesby Union** is the center of student activity on campus, hosting a variety of cultural, educational, social, and recreational activities. Union facilities include a student activities center; an entertainment club; restaurants; study and television lounges; an arts center and gallery; a bowling, billiards, and games room; lost and found; automatic teller machines; information center; student organization offices; meeting rooms; auditorium; and ballrooms. The Oglesby Union complex is also home to student campus post office, UPS Store, and Computer Lab.

The Oglesby Union coordinates multiple University-wide events including Seminole Sensation Week, Homecoming, Parents' Weekend, and Family Weekend. Seminole Sensation Week welcomes incoming and returning students the week prior to the beginning of Fall semester classes. The events and activities provide students with an opportunity to learn more about campus life. Homecoming builds spirit on campus and in the community for Florida State University and welcomes alumni back. Student organizations come together to participate and compete in Homecoming activities. Parents' and Family Weekends welcome parents and families to campus to share in the FSU experience with their students. Parents' Weekend is in the Fall, and Family Weekend is in the Spring.

The Oglesby Union comprises multiple departments providing services, support, and programming for the university community. The Art Center offers a variety of classes and programs including Paint-a-Pot, Art in Low Places, and a full-service frame shop. You can enjoy rotating exhibits and art-

work 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, dances, and banquets. Recognized Student Organizations may request space by stopping by the **Guest Services** office in the Krentzman Lounge of Oglesby Union, visiting them online at <http://unionreservations.fsu.edu> or by calling them at (850) 644-6083.

Create your FSU Experience is the new slogan for The **Student Activities Center (SAC)**. Located on the third floor of the Oglesby Union, Activities Building, SAC is your direct connection to getting involved on campus. Over 500 student organizations are recognized annually by Student Activities Departments within the SAC include Student Organization Services (SOS), Union Productions (UP), Market Wednesdays and Special Event Planning (SEP). The Student Activities Center is also home to Homecoming and Dance Marathon. Resources for students include copying, faxing, storage space, campus mailboxes, and meeting space all in room A305 Oglesby Union.

Students who participate in **Union Productions** provide leadership and direction in all facets of social, cultural, and educational programming. Students gain experience in booking events, marketing and advertising, hospitality, staffing large shows, and a variety of leadership skills. Union Productions sponsors a variety of programs 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 home to one of the nation's leading campus movie programs, showing a variety of films each week in the 380 seat Student Life Cinema. While at the ASLC, check out the Cyber Café where you can enjoy video and computer gaming or get a drink and treat at Grind House. The Congress of Graduate Students (COGS), the National Pan-Hellenic Council (NPHC), University Housing, and the 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, spread sawdust, and string lights. The Flying High Circus performs on campus in the Fall, during Parents' Weekend, and in the Spring, for the Annual Home Show Series.

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>.

Office of Veterans' Affairs

The Office of Veterans' Affairs serves both veterans and their dependents by providing certification of enrollment for VA educational benefits as well as other community resource information. Students who may be eligible for benefits are encouraged to contact the Office of Veterans' Affairs to initiate, change, or renew benefits at Florida State University as soon as possible each semester. The Office of Veterans' Affairs is located within the Office of the University Registrar. For more information, please visit 3900 UCA, call (850) 644-1252, fax (850) 644-1597, e-mail veteran@admin.fsu.edu, or visit <http://registrar.fsu.edu/services/veterans/>.

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 (89.7 FM), the Voice of Florida State, is the FSU student-run radio station. An affiliated project of the Student Government Association and the College of Communication and Information, it serves two purposes: to supply the student body with music and information not available on other local radio stations and to train Florida State University students in the basic concepts of broadcasting and radio station management. WVFS also airs a wide array of specialty shows, and sports programming pertinent to University students.

Anyone enrolled at Florida State University or in the FAMU—FSU Cooperative Program is eligible to work for WVFS. Most staff members work on a volunteer basis; however, in some instances class credit can be earned through Department of Communication courses. Students with writing, sales, public relations, and audio production skills are welcome, but no experience is required. WVFS recruits for all positions three times a year, always during the first week of each semester; listen to 89.7 FM for details.

Health Care

University Health Services (UHS) provides primary out-patient medical care to eligible FSU students and their dependents age thirteen years and older. Currently enrolled, fee-paying students are not charged for illness or injury office visits. Additional services such as procedures, lab, X-ray, and physical therapy are provided at a fee. UHS will bill the student's insurance for any charges incurred. Services include general medical care, women's care, psychiatry, allergy injection clinic, immunizations, nutrition, health promotion, confidential HIV testing, lab, X-ray, and physical therapy.

UHS clinical staff includes board-certified physicians, psychiatrists, advanced registered nurse practitioners, physician assistants, licensed practical nurses, x-ray technologists, registered nurses, and dietitians. The health center has more than 100 full-time employees and also employs many part-time and student staff members.

Construction of a brand new University Health and Wellness Center is scheduled to open in summer 2012. The 140,000 square foot facility is a collaborative effort between the Division of Student Affairs and Academic Affairs. The new facility has space dedicated to comprehensive prevention and treatment services for the campus community.

All students must meet State Board of Education immunization requirements. Immunization requirements are explained on the second page of the health history form. The health history form can be found at <http://www.uhs.fsu.edu> on the Forms page. Immunization documentation and health history 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 also call either the Health Compliance Office at (850) 644-3608, or Collegiate Risk Management at (850) 644-4250 or (800) 922-3420. 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 Health Promotion Department is dedicated to assisting FSU students in their academic success through individual, group, and population-based health and wellness initiatives. The Health Promotion Department also addresses the Healthy Campus 2020 Mission. To maximize campus wellness, we support academic and personal success by:

- Addressing environmental factors that reduce risk
- Educating about healthy lifestyles
- Promoting positive choices and behaviors
- Providing a coordinated continuum of care
- The Health Promotion Department also offers internships and educational opportunities. The UHS Health Promotion Department mentors, trains, and advises peer health educators while encouraging creativity and leadership. The peer health educators:

- Advocate for health and wellness to all FSU students under the auspices of Healthy Campus 2010/2020
- Function as an extension of UHS' Health Promotion Department, assisting with collective goals and objectives
- Create and deliver sustainable outreach and prevention initiatives
- Make healthy and safe lifestyle decisions and avoid high-risk behaviors
- Encourage their friends to develop responsible habits and attitudes toward high-risk health and issues

Students can also become nationally certified peer health educators through affiliation with the BACCHUS Network, a university and community based network focusing on comprehensive health and safety initiatives. 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) 644-8871.

Counseling Services

The University Counseling Center (UCC), 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. Services are free to all currently enrolled FSU students and include time-limited individual counseling, unlimited group therapy, crisis intervention, consultation, 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://www.counseling.fsu.edu>. The UCC is a sponsor of Safe Zone, an ally organization for lesbian, gay, bisexual and transgender individuals. The UCC also 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.

Counseling sessions are by appointment except in cases of emergency. Records of visits to the UCC 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 University Counseling Center's staff will make referrals for ongoing treatment in the Tallahassee community. Treatment outside the center will be at the student's expense.

The University Counseling Center is located in the *Askev Student Life Center, Suite 201*. To schedule an appointment, call (850) 644-2003 or visit our office Monday through Friday between 8:00 a.m. and 5:00 p.m. Additional information is available on our Web site at <http://www.counseling.fsu.edu>. The University Counseling Center is accredited by the International Association of Counseling Services, Inc.

The Florida State University Psychology Clinic provides scientifically supported therapy services for a variety of client concerns, including problems related to anxiety, depression, relationship issues, stress, and other personal issues. The clinic also conducts intellectual, academic, personality, and learning disability evaluations.

Therapy fees are on a sliding scale that is based on the client's financial resources, and fees for assessments are at a low, flat rate.

Clinic therapists are graduate students seeking their doctoral degrees in the Clinical Psychology Program, and all work is closely supervised by clinical psychology faculty.

To apply for services, call the clinic at (850) 644-3006. The clinic is located at the east end of the new *Psychology Department Building, C122 PDB*. Hours are Monday–Thursday from 8:00 a.m. to 9:00 p.m., and Friday from 8:00 a.m. to 4:00 p.m.

Housing

The **Office of University Housing** makes available living accommodations for full-time, degree-seeking, fee-paying students. Residence hall staff members seek to create living environments that promote the personal and intellectual development of resident students. For more information, see the "Housing" chapter of this *General Bulletin*.

Child Care

FSU Child Development Programs (FSUCDP) provides, for a fee, care and educational experiences in two centers for a limited number of children, ages six weeks to five years of age. Children of Florida State University students

are given priority for enrollment. Space is limited, so please apply early. Applications are available at <http://www.childcare.fsu.edu> and when completed may be faxed to (850) 644-7997.

FSUCDP also provides 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 or work with young children. For additional information, contact *FSU Child Development Programs, 103 Askew Student Life Center, 942 Learning Way, P.O. Box 3064174 Tallahassee, FL 32306-4174, (850) 644-2860*, or visit the Web site at <http://www.childcare.fsu.edu>.

The **FSU Children's Center**, located at *169 Herlong Drive*, provides, for a fee, an early learning program for children two and one-half to five years of age. The hours are 7:30 a.m. to 5:30 p.m. Monday through Friday when classes at FSU are in session. The **Infant and Toddler Child Development Center**, located at *330 Pennell Circle*, provides, for a fee, an early learning program for children ages six weeks to two and one-half years of age. The hours are 7:30 a.m. to 5:30 p.m. Monday through Friday when classes at FSU are in session.

Assessment Services

For information concerning Assessment Services, please refer to the 'Office of Distance Learning' section in "The University" chapter of this *General Bulletin*.

Parking and Bus Services

The **Office of Transportation Services** is responsible for the administration of the parking and transportation program on campus. The University requires students, staff, faculty, and visitors who want to park on campus to display a valid Florida State University parking permit. 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. Temporary permits are distributed, when needed, by Transportation Services located at *University Center C5406, 8:00 a.m. to 5:00 p.m., Monday through Friday*. Student permits must be obtained online at <http://parking.fsu.edu>.

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

Parking is extremely difficult on the University campus. It is suggested that students walk, bike, or use the **Seminole Express**, the University's free campus bus service. The Seminole Express has five routes that serve on and off campus locations. The buses operate from 7:00 a.m. to 7:00 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 with valid FSUCard IDs may ride the 'Free Fare' on the buses of StarMetro (city of Tallahassee public transportation) to any of the designated bus stops within the city. For more information about parking and bus services please visit: <http://parking.fsu.edu>.

Bicycle Parking

In accordance with Florida Americans with Disabilities Act of 1993, the State of Florida Fire Marshal's Rules and Regulations and University rules, it is unlawful and dangerous to park bicycles in locations where they impede pedestrian or vehicular traffic. Prohibited areas include:

- Any area within six feet in front and to the side of any entrance to or exit from any building;
- Within any sidewalk; or along a fence
- On any access or egress ramp, steps, stairs or handrails;
- In corridors;
- Within any roadway or motor vehicle parking spaces.

Florida State University Police Department is authorized to cut security chains and remove for impoundment any bicycle parked or stored in violation of this rule.

Any person whose bicycle has been impounded may claim that bicycle within thirty days of impoundment by contacting Florida State University Police. The burden of proving ownership shall rest upon the person claiming the bicycle. Bicycles not claimed within thirty days shall be considered abandoned and will be disposed of in accordance with State and University rules governing abandoned property. For more information on bicycle registration, where to park your bike, and how to operate it safely, please contact Florida State University Police at (850) 644-1234. Regulations governing parking on campus, bus routes, and schedules are available upon request from: *The Office of Transportation, UCC 5406, Tallahassee, FL 32306-2532*.

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 depart-

ment 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 *Seminole Safety Guide*, in compliance with the Campus Security Act of 1990, is published and distributed annually online, with hard-copy available upon request. The Safety Guide describes all safety programs and security services available at the University. It contains safety tips and emergency telephone numbers, policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other matters, as well as campus crime statistics. Copies are available through the FSU Police Department. The safety guide is available on the Web at <http://police.fsu.edu/content/download/7601/50209>.

The Student Government Association 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/Crime-Prevention>.

The **Blue Light Trail**, comprising over 400 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.

Seminole Dining

Seminole Dining offers a variety of dining options for students, faculty, staff and guests. Choose from national brand favorites.

- **Residential Restaurants**—featuring unlimited servings of freshly made-to-order food.
 - **Figg Players Dining Room**—University Center D
 - **Fresh Food Company**—between Stone Building and Salley Hall
 - **Suwannee Room**—William Johnston Building between Bryan and Reynolds Hall
- **Retail Locations**
 - **Energy Zone**—Bobby E. Leach Recreation Center, Oglesby Union
 - **Chili's**—Oglesby Union
 - **Einstein Bros. Bagels**—Oglesby Union
 - **Freshens**—Bobby E. Leach Recreation Center, Oglesby Union
 - **Miso Sushi and Noodle Bar**—Oglesby Union
 - **Papa John's**—Oglesby Union
 - **Pollo Tropical**—Oglesby Union
 - **Salad Creations**—Oglesby Union
 - **Subway**—Oglesby Union
 - **Denny's All Nighter**—Woodward and Traditions Way in Student Services Building
- **Convenience Store**
 - **Trading Post**—Oglesby Union
- **Starbucks**
 - **Barrister's Bistro**—College of Law
 - **College of Medicine**
 - **Strozier Library**
 - **Wildwood and Woodward Avenue**

All dining locations accept cash, Garnet Bucks, Flex Bucks, Visa, MasterCard, and the FSUCard. Meal Plans (prepaid amount of meals) are available at The Suwannee Room, Fresh Food Company, and Figg Players Dining Room (Lunch Only). Visit the Customer Service Office to sign up for a Meal Plan or to add money to a Garnet Bucks account. New locations are always in the works; for updated information on all Seminole Dining has to offer, please visit <http://www.seminoledining.com>, or call (850) 644-3663.

Students First

Students First is an information and service counter located on the ground floor of *University Center A*. Students can ask questions about financial aid, registration, fee payments, admissions, and anything regarding Florida State University. The Students First staff will assist students in the most convenient manner to solve their respective concern or issue.

Available at University Center A, Leach Center, and at University Health Services. **Students First Web Service kiosks** provide students with access to a variety of information regarding their current status. The kiosks allow students to access their semester grades, unofficial transcripts, class schedules, and student account statements, and enable students to change their address, view the status of their financial aid disbursement, and make payments online. For more information, please visit our Web site at <http://www.studentsfirst.fsu.edu>.

Center for Multicultural Affairs

The mission of the Center for Multicultural Affairs (CMA) at Florida State University is to create a welcoming environment that is inclusive of all students. To that end, the Center for of Multicultural Affairs provides advocacy, support services, and culturally based programs that educate students on diversity and multiculturalism and empowers them to be agents of social change in an increasingly diverse and global community.

The Center for Multicultural Affairs is committed to the philosophy that multiculturalism enhances the quality of student life. The goal of CMA is to:

- Aid students as they explore their multiple identities, including race/ethnicity, class, gender identity, nationality, disability, religion/spirituality, and sexual orientation.
- Promote a welcoming environment for community partnerships between students, staff, faculty, and administrators.
- Encourage opportunities for student collaboration on projects such as programs, committees, and task forces.
- Foster a respect for and appreciation for the history, tradition, and cultures of all of our students within the FSU community.

Some of our programs include the:

- Multicultural Gathering and Showcase
- Annual Cultural Celebrations, including Hispanic Heritage, American Indian, Black History, and Asian American Heritage Months
- Annual Dr. Martin Luther King Jr. Commemorative Celebration
- Dr. Martin Luther King Jr. Book Stipend, the Seth Rossetti Memorial Scholarship, and the Angie Cintron Memorial Scholarships
- Ambassadors for Multicultural Affairs Program
- Dr. Antonia Pantoja Scholars Program
- FSUnity Day
- CMA Graduation and Recognition Ceremony
- Multicultural Leadership Summit

For more information, please contact the Center for Multicultural Affairs at (850) 644-2450.

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 twenty-five 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 Statewide Course Numbering System to obtain course descriptions and specific information about course transfer between participating Florida institutions. This information is available on the SCNS Web site, at <http://scns.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 Statewide Course Numbering System. 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 fifty-six different 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 success-

fully 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 the community college 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 exempted 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. College preparatory and vocational preparatory 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 (<http://scns.fldoe.org>) a report entitled "Courses at Nonregionally Accredited Institutions" that contains a comprehensive listing of all nonpublic 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 *Melissa Crawford* in the *Office of the Dean of the Faculties* or the *Florida Department of Education, Office of Articulation, 1401 Turlington Building, Tallahassee, Florida 32399-0400*.

Special reports and technical information may be requested by calling the *Statewide Course Numbering System* office at (850) 245-0427 or at <http://scns.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)
ACG	Accounting: General	Accounting
ADE	Adult Education	Educational Leadership and Policy Studies Educational Psychology and Learning Systems
ADV	Advertising	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
AMS	American Studies	American and Florida Studies
ANG	Anthropology: Graduate	Anthropology
ANT	Anthropology	Anthropology
APK	Applied Kinesiology	Education Psychology and Learning Systems Nutrition, Food, and Exercise Science
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	Classics History
ASL	American Sign Language	Communication Science and Disorders
ASN	Asian Studies	Asian Studies
AST	Astronomy	Physics
BCC	Basic Clinical Clerkship	Medicine
BCH	Biochemistry (Biophysics)	Biological Science Chemistry and Biochemistry
BME	Biomedical Engineering	Chemical and Biomedical Engineering
BMS	Basic Medical Sciences	Medicine Biomedical Sciences
BOT	Botany	Biological Science
BSC	Biological Sciences	Biological Science
BUL	Business Law	Risk Management/Insurance, Real Estate, and Legal Studies
CAP	Computer Application Development	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 Library and Information Studies Teacher Education
CHD	Child Development	Family and Child Sciences
CHI	Chinese	Modern Languages and Linguistics
CHM	Chemistry	Chemistry and Biochemistry
CHT	Chinese Literature in Translation	Modern Languages and Linguistics
CIS	Computer Science and Information Systems	Computer Science Criminology and Criminal Justice
CJC	Corrections	Criminology and Criminal Justice
CJE	Law Enforcement	Criminology and Criminal Justice Public Safety and Security
CJJ	Juvenile Justice	Criminology and Criminal Justice
CJL	Law and Process	Criminology and Criminal Justice
CLA	Classical and Ancient Studies	Classics History
CLP	Clinical Psychology	Psychology
CLT	Classical Literature in Translation	Classics
CNT	Computer Networks	Computer Science
COA	Home Economics: Consumer Affairs	Retail Merchandising and Product Development
COM	Communication	Communication
COP	Computer Programming	Computer Science Criminology and Criminal Justice Library and Information Studies Management
COT	Computing Theory	Computer Science
CPO	Comparative Politics	Political Science
CPS	Comparative Policy Studies	Social Science
CRW	Creative Writing	English
CTE	Home Economics: Clothing, Textiles and Merchandising	Retail Merchandising and Product Development Interior Design
CWR	Civil Water Resources	Civil and Environmental Engineering
DAA	Dance, Emphasis on Activities	Dance
DAE	Dance Education	Dance
DAN	Dance	Dance
DEM	Demography	Sociology
DEP	Developmental Psychology	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	Psychology
EAP	English as a Second Language for Academic Purposes	Teacher Education
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	Education: 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	Teacher Education
EGI	Education: Gifted	Educational Psychology and Learning
EGM	Engineering Science	Civil and Environmental Engineering Mechanical Engineering
EGN	Engineering: General	Chemical and Biomedical Engineering Civil and Environmental Engineering Industrial and Manufacturing Engineering Mechanical Engineering Statistics
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
ENG	English: General	English
ENL	English Literature	English
ENT	Entrepreneurship	Entrepreneurship
ENV	Engineering: Environmental	Civil and Environmental Engineering
EOC	Oceanography/Ocean Engineering	Earth, Ocean, and Atmospheric Science
ESC	Earth Science	Earth, Ocean, and Atmospheric 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
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 and Biblical Languages	Modern Languages and Linguistics
FOS	Food Science	Nutrition, Food and Exercise Sciences
FOW	Foreign and Biblical Languages, Comparative Literature (Writings)	Modern Languages and Linguistics
FRE	French Language	Modern Languages and Linguistics
FRT	French in Translation and/or Translation Skills	Modern Languages and Linguistics
FRW	French Literature (Writings)	Modern Languages and Linguistics
FSS	Food Service System	Nutrition, Food and Exercise Sciences
GEA	Geography: Regional Areas	Geography
GEB	General Business	Accounting Finance Management Marketing
GEO	Geography: Systematic	Geography
GER	German	Modern Languages and Linguistics
GET	German Literature in Translation	Modern Languages and Linguistics
GEW	German Literature (Writings)	Modern Languages and Linguistics
GFD	Geophysical Fluid Dynamics	Geophysical Fluid Dynamics
GIS	Geographic Information Systems	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

HME	Home Economics: Home Management and Equipment	Retail Merchandising and Product Development
HOE	Home Economics: General	Family and Child Sciences
HPS	History and Philosophy of Science	Program in History and Philosophy of Science Religion
HSC	Health Sciences	Nutrition, Food, and Exercise Sciences Public Health Social Science Teacher Education
HUM	Humanities	Humanities
HUN	Human Nutrition	Nutrition, Food, and Exercise Sciences
IDC	Interdisciplinary Computing	Library and Information Studies
IDS	Interdisciplinary Studies	Teacher Education
IHS	Interdisciplinary Health Sciences	Biomedical Sciences Medicine
IND	Interior Design	Interior Design
INP	Industrial and Applied Psychology	Psychology
INR	International Relations	International Affairs Political Science
ISC	Interdisciplinary Sciences	Biological Science Chemistry and Biochemistry Earth, Ocean, and Atmospheric Science Psychology Public Safety and Security Science Teaching Scientific Computing
ISM	Information Systems Management	Management
ISS	Interdisciplinary Social Sciences	Social Science
ITA	Italian Language	Modern Languages and Linguistics
ITT	Italian Literature in Translation	Modern Languages and Linguistics
ITW	Italian Literature (Writings)	Modern Languages and Linguistics
JPN	Japanese	Modern Languages and Linguistics
JPT	Japanese Literature in Translation	Modern Languages and Linguistics
KOR	Korean Language and Literature	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 Sport Management
LIN	Linguistics	Anthropology Communication Science and Disorders English Modern Languages and Linguistics Teacher Education
LIS	Library and Information Studies	Library and Information Studies Teacher Education
LIT	Literature	English

LNW	Latin Literature (Writings)	Classics
MAA	Mathematics: Analysis	Mathematics
MAC	Mathematics: Calculus and Precalculus	Mathematics
MAD	Mathematics: Discrete	Mathematics Scientific Computing
MAE	Mathematics Education	Mathematics Teacher Education
MAN	Management	Finance Management Marketing
MAP	Mathematics: Applied	Mathematics Earth, Ocean, and Atmospheric Science Scientific Computing
MAR	Marketing	Marketing
MAS	Mathematics: Algebraic Structures	Mathematics
MAT	Mathematics	Mathematics
MCB	Microbiology	Biological Science
MEL	Medical Science Electives	Biomedical Sciences Medicine
MET	Meteorology	Earth, Ocean, and Atmospheric Science
MGF	Mathematics: General and Finite	Mathematics
MHF	Mathematics: History and Foundations	Mathematics
MHS	Mental Health Services	Educational Psychology and Learning Systems Teacher Education
MMC	Mass Media Communication	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/Music 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 Instruments	Music
MVP	Applied Music: Percussion	Music
MVS	Applied Music: Strings	Music
MVV	Applied Music: Voice	Music
MVW	Applied Music: Woodwinds	Music
NGR	Nursing: Graduate	Nursing
NSP	Nursing: Special	Nursing
NUR	Nursing: Generic Undergraduate	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	Mathematics Earth, Ocean, and Atmospheric Science
ORI	Oral Interpretation	Communication
PAD	Public Administration	Public Administration and Policy
PAX	Peace Studies	International Affairs
PCB	Process Biology	Biological Science Psychology
PCO	Psychology for Counseling	Educational Psychology and Learning Systems
PEL	Physical Education Activities (General): Land-Object Centered	Sport Management
PEM	Physical Education Activities (General): Land-Performance Centered	Sport Management
PEN	Physical Education Activities (General): Water, Snow, Ice	Earth, Ocean, and Atmospheric Science Sport Management
PEO	Physical Education Activities (Professional): Land-Object Centered	Sport Management
PEP	Physical Education Activities (Professional): Land-Performance Centered	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
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	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
PRT	Portuguese in Translation	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	Political Science
PUR	Public Relations	Communication
QMB	Quantitative Methods in Business	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	Religion

RMI	Risk Management/Insurance	Risk Management/Insurance, Real Estate and Legal Studies
RTV	Radio-Television	Communication
RUS	Russian Language	Modern Languages and Linguistics
RUT	Russian Literature in Translation	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 Atmospheric Science Psychology 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	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	Social Work
SPA	Speech Pathology and Audiology	Communication Science and Disorders
SPC	Speech Communication	Communication
SPM	Sports Management	Sport Management
SPN	Spanish Language	Modern Languages and Linguistics
SPS	School Psychology	Educational Psychology and Learning Systems
SPT	Spanish Literature in Translation and/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	Sociology
SYP	Social Processes	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 Performance Training	Theatre
TSL	Teaching English as a Second Language	Teacher Education
TTE	Transportation Engineering	Civil and Environmental Engineering
URP	Urban and Regional Planning	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

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- **Jeanette DeDiemar**, Assistant Vice President for University Relations and Director of University Communications
- **Michele Edmunds**, Director of the University Photo Lab
- **Jill Elish**, Interim Director of News and Research Communications
- **Tom Hunt**, Event Coordinator
- **Patrick Keating**, General Manager of Broadcast Center
- **Reinhart Lerch**, Director of Marketing, University Communications
- **Steve MacQueen**, Director of Seven Days of Opening Nights
- **Donna McHugh**, Assistant Vice President for Community Relations
- **Paula Moyer**, Chief of Staff
- **Lynna Sands**, Senior Executive Support Assistant
- **Dennis Schnittker**, Director of Visual Media and Promotions
- **Aimee Wirth**, Special Events Coordinator

Vice President for Research:

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

- **Gary K. Ostrander**, Vice President for Research
- **Gregory S. Boebinger**, Director of National High Magnetic Field Laboratory
- **Raymond Bye**, Director of Federal Relations and Economic Development
- **Dave Cartes**, Director of the Institute for Energy Systems, Economics, and Sustainability (IESES)
- **Felicia C. Coleman**, Director of FSU Coastal and Marine Laboratory
- **Steinar J. Dale**, Director of the Center for Advanced Power Systems (CAPS)
- **Peter Derham**, Director of Sponsored Research Accounting Services
- **W. Ross Ellington**, Associate Vice President and Greenburg Professor of Biological Science
- **John A. Fraser**, Assistant Vice President for Research and Executive Director of IP Development and Commercialization
- **Kathleen Harper**, Director of Laboratory Animal Resources
- **Linda McCorvey**, Senior Executive Support Assistant
- **Holly Newell**, Chief Financial Officer of FSU Research Foundation
- **Olivia H. Pope**, Assistant Vice President for Research
- **Gus Ray**, Senior Director of Corporate and Foundation Relations
- **Lezlee Richerson**, Executive Support Assistant
- **Elizabeth (Betty) Southard**, Legal Counsel
- **Gregory W. Thompson**, Director of Sponsored Research Services

College Deans:

- **Ken Shaw**, College of Applied Studies, Panama City Campus, FL:
<http://appliedstudies.pc.fsu.edu/>
- **Sam Huckaba, Interim**, College of Arts and Sciences:
<http://artsandsciences.fsu.edu/>
- **Caryn Beck-Dudley**, College of Business:
<http://cob.fsu.edu/>
- **Larry Dennis**, College of Communication and Information:
<http://cci.fsu.edu/>
- **Thomas Blomberg**, College of Criminology and Criminal Justice:
<http://crim.fsu.edu/>
- **Marcy P. Driscoll**, College of Education:
<http://www.coe.fsu.edu/>
- **Yaw Yeboah**, FAMU-FSU College of Engineering:
<http://eng.fsu.edu/>
- **Nancy Marcus**, The Graduate School:
<http://gradschool.fsu.edu/>
- **Billie Collier**, College of Human Sciences:
<http://www.chs.fsu.edu/>
- **Donald J. Weidner**, College of Law:
<http://www.law.fsu.edu/>
- **John P. Fogarty**, College of Medicine:
<http://med.fsu.edu/>
- **Frank Patterson**, College of Motion Picture Arts:
<http://film.fsu.edu/>
- **Don Gibson**, College of Music:
<http://music.fsu.edu/>
- **Dianne Speake, Interim**, College of Nursing:
<http://nursing.fsu.edu/>
- **David W. Rasmussen**, College of Social Sciences and Public Policy:
<http://www.coss.fsu.edu/>
- **Nicholas F. Mazza**, College of Social Work:
<http://csw.fsu.edu/>
- **T. Lynn Hogan, Interim**, College of Visual Arts, Theatre and Dance:
<http://cvatd.fsu.edu/>

DISTINGUISHED FACULTY

Distinguished Research Professors

Harper, William C., MS, Distinguished Research Professor, 1990–1991, Professor of Studio Art (Retired)

O'Brien, James J., PhD, Texas A&M; Distinguished Research Professor, 1990–1991, Robert O. Lawton Distinguished Professor, 1999–2000, Professor of Meteorology and Oceanography, and Russian Academy of Natural Science (Retired)

Tam, Christopher K. W., PhD, California Institute of Technology; Distinguished Research Professor, 1990–1991, Robert O. Lawton Distinguished Professor, 2000–2001, Professor of Mathematics and Mechanical Engineering

Eisenberg, Daniel, PhD, Brown; Distinguished Research Professor, 1991–1992, Professor of Modern Languages (Resigned)

Loper, David E., PhD, Case Western Reserve; Distinguished Research Professor, 1991–1992, George W. DeVore Professor of Geological Sciences, 1999, and Director, Geophysical Fluid Dynamics Institute (Retired)

Parker, Glenn R., PhD, California; Distinguished Research Professor, 1991–1992, Professor of Political Science

Benson, Bruce L., PhD, Texas A&M; Distinguished Research Professor, 1992–1993, Professor of Economics

Graziadei, Pasquale P., MD, Pavia, Italy; Distinguished Research Professor, 1992–1993, Professor of Biological Science (Retired)

Summers, Dewitt L., PhD, Cambridge; Distinguished Research Professor, 1992–1993, Robert O. Lawton Distinguished Professor, 1997–1998, and Professor of Mathematics (Retired)

Kemper, Kirby W., PhD, Indiana; Distinguished Research Professor, 1993–1994, John David Fox Professor of Physics, 2000, and Robert O. Lawton Distinguished Professor, 2002–2003 (Retired)

Nam, Charles B., PhD, North Carolina; Distinguished Research Professor, 1993–1994, Professor of Sociology (Retired)

Turner, Ralph V., PhD, Johns Hopkins; Distinguished Research Professor, 1993–1994, Service Professor of History (Retired)

Bryant, John L., PhD, Georgia; Distinguished Research Professor, 1994–1995, Professor of Mathematics (Retired)

Freeman, Marc E., PhD, West Virginia; Distinguished Research Professor, 1994–1995, Lloyd M. Beidler Professor of Biological Science, 2000 (Retired)

Owens, Joseph F., III, PhD, Tufts; Distinguished Research Professor, 1994–1995, Chair and Guenter Schwarz Professor of Physics, 2000

Hollander, Myles, PhD, Stanford; Distinguished Research Professor, 1995–1996, Robert O. Lawton Distinguished Professor, 1998–1999, and Professor of Statistics

James, Frances C., PhD, Arkansas; Distinguished Research Professor, 1995–1996, Pasquale Graziadei Professor of Biological Science, 1999 (Retired)

Stern, Melvin E., PhD, Massachusetts Institute of Technology; Distinguished Research Professor, 1995–1996, V. W. Ekman Professor of Oceanography, and National Academy of Sciences (Deceased)

Pfeffer, Richard, PhD, Massachusetts Institute of Technology; Distinguished Research Professor, 1996–1997, Carl-Gustaf Rossby Professor of Meteorology (Retired)

Torgesen, Joseph, PhD, Michigan; Distinguished Research Professor, 1996–1997, Robert M. Gagne Professor of Psychology and Education, 2000, and Professor of Psychology (Retired)

Van Sciver, Steven W., PhD, Washington; Distinguished Research Professor, 1996–1997, Professor of Mechanical Engineering

Hagopian, Vasken, PhD, Pennsylvania; Distinguished Research Professor, 1997–1998, Joseph E. Lannutti Professor of Physics, 1999 (Retired)

Myles, John F., PhD, Wisconsin; Distinguished Research Professor, 1997–1998, Professor of Sociology

Nicholson, Sharon E., PhD, Wisconsin; Distinguished Research Professor, 1997–1998, Heinz and Katharina Lettau Professor of Climatology, 2002, and Professor of Meteorology

Balkwill, David L., PhD, Pennsylvania State; Distinguished Research Professor, 1998–1999, Professor of Biological Science

Hirsh, Barry T., PhD, Virginia; Distinguished Research Professor, 1998–1999, Professor of Economics

Marshall, Alan George, PhD, Stanford; Distinguished Research Professor, 1998–1999, Kasha Professor of Chemistry, 1999

Gontarski, Stanley E., PhD, Ohio State; Distinguished Research Professor, 1999–2000, Sarah Herndon Professor of English, 1999

Holton, Robert A., PhD, Florida State; Distinguished Research Professor, 1999–2000, Matthew Suffness Professor of Chemistry, 2002

Clarke, Allan J., PhD, Cambridge; Distinguished Research Professor, 2000–2001, Adrian E. Gill Professor of Oceanography, 2001

Cross, Timothy A., PhD, Pennsylvania; Distinguished Research Professor, 2000–2001, Earl Frieden Professor of Chemistry and Biochemistry, 2002

Olsen, Dale A., PhD, California at Los Angeles; Distinguished Research Professor, 2000–2001, Professor of Music (Retired)

Fenstermaker, John J., PhD, Ohio State; Distinguished Research Professor, 2001–2002, Distinguished Teaching Professor, 2000–2001, Fred L. Standley Professor of English, 2002 (Retired)

Tabor, 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

Berkley, Karen J., PhD, Washington; Distinguished Research Professor, 2003–2004, McKenzie Professor and Professor of Psychology (Retired)

Perrewe, Pamela L., PhD, Nebraska; Distinguished Research Professor, 2003–2004, and Professor of Management

Standley, Jayne M., PhD, Florida State; Distinguished Research Professor, 2003–2004, and Ella Scoble Opperman Professor of Music, 2000

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, Krishnamurthy Karamcheti Professor of Engineering, 2000, and of Mechanical Engineering

Roux, Kenneth H., PhD, Tulane; Distinguished Research Professor, 2004–2005, Professor of Biological Science

Chanton, Jeffrey Paul, PhD, North Carolina at Chapel Hill; Distinguished Research Professor, 2005–2006, John Widmer Winchester Professor of Oceanography, 2002, and Professor of Oceanography and Geological Sciences

Kelsay, John E., PhD, Virginia; Distinguished Research Professor, 2005–2006, Richard L. Rubenstein Professor of Religion, 2000, and Chair of Religion

Von Molnar, Stephan, PhD, California at Riverside; Distinguished Research Professor, 2005–2006, Robert A. Kromhout Professor of Physics, 2001, and Director, Center for Materials Research and Technology

Wagner, Richard K., PhD, Yale; Distinguished Research Professor, 2005–2006, Alfred Binet Professor of Psychology, 1999

Joiner, Thomas E., Jr., PhD, Texas at Austin; Distinguished Research Professor, 2006–2007, Bright-Burton Professor of Psychology

Riley, Mark A., PhD, Liverpool; Distinguished Research Professor, 2006–2007, Raymond K. Sheline Professor of Physics, 2001

Sathe, Shridhar K., PhD, Utah State; Distinguished Research Professor, 2006–2007, Distinguished Teaching Professor, 2002–2003, D.K. Salunkhe Professor of Food Science, 2001, Professor of Nutrition, Food and Exercise Sciences

Winegardner, Mark, MFA; Distinguished Research Professor, 2006–2007, Janet M. Burroway Professor of English, 2001

de Grummond, Nancy T., PhD, North Carolina; Distinguished Research Professor, 2007–2008, M. Lynette Thompson Professor of Classics, 1999

Manoussakis, 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

Yancev, 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

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

Ouimet, Charles C., PhD, Brown; Distinguished Teaching Professor, 2004–2005, Professor and Faculty Scholar in Neuroscience

Carroll, Pamela S., Ed.D., 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 University; Distinguished Teaching Professor, 2011–2012, Associate Professor of Family and Child 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 Professor 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)

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 (Retired)

LaPointe, Leonard L., PhD, Colorado at Boulder; Eppes Professor, 2000, Professor of Communication Disorders

Labalestier, 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

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 William 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., Ed.D., 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

- Feicock, 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. Boshch 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 (Retired)
- 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 and Family 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)

Choppin, Gregory R., PhD, Texas; Sc.D., Loyola; Distinguished Professor 1967–1968, Professor of Chemistry (Retired)

Fallon, Richard Gordon, MA, Distinguished Professor 1975–1976, Professor and Dean, 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)

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 (Retired)

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 Director, Program for Women in Math, Science, and Engineering

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)

Nikolaidi, 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)

Proschan, Frank, PhD, Stanford; Distinguished Professor 1984–1985, Professor of Statistics (Retired)

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)

Savage, I. Richard, PhD, Columbia; Distinguished Professor 1973–1974, Professor of Statistics (Resigned)

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)

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

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 (Retired)

Taylor, J. Herbert, PhD, Robert O. Lawton Distinguished Professor 1983–1984, Service Professor of Biological Science (Deceased)

Kroto, Harold W. PhD, University of Sheffield; Francis Eppes Professor of Chemistry, Nobel Laureate in Chemistry, 1996 (Retired)

National Academy Of Engineering, Florida State University Members

Larbaestier, David C., PhD, Imperial College London; Francis Eppes Professor of Superconducting Materials

Ostrach, Simon, PhD, Brown; Distinguished Professor of Engineering (Resigned)

Institute 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

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

Buchanan, James, PhD, Chicago, Professor of Economics, Nobel Laureate in Economic Science, 1986

Dirac, Paul A.M., PhD, St. Johns College, Cambridge, Professor of Physics, Nobel Laureate in Physics, 1933

Kroto, Harold W., PhD, University of Sheffield; Francis Eppes Professor of Chemistry, Nobel Laureate in Chemistry, 1996

Mulliken, Robert S., PhD, Chicago, Professor of Chemistry, Nobel Laureate in Chemistry, 1966

Schrieffer, J. Robert, PhD, Illinois, Professor of Physics, Nobel Laureate in Physics, 1972

Florida State University

2012-2013

General Bulletin

GRADUATE INFORMATION SECTION

Information in this section applies to graduate students and programs of study.

This section includes:

- The University
- Admissions
- Financial Information, Tuition, Fees, Aid, Scholarships, and Employment
- Housing
- Orientation and Information Sessions
- Office of the University Registrar
- Graduate Degree Requirements
- Academic Regulations and Procedures
- College of Applied Studies
- 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
- The Graduate School
- College of Human Sciences
- College of Law
- College of Medicine
- College of Motion Picture Arts
- College of Music
- College of Nursing
- College of Social Sciences and Public Policy
- College of Social Work
- College of Visual Arts, Theatre and Dance
- Graduate Academic Departments and Programs

The General Information Section contains information that applies to all students and programs of study.

The Undergraduate Information Section contains information specific to undergraduate students and programs of study.

THE UNIVERSITY

Florida State University Mission Statement

Vision

Florida State University will be one of the world's premier institutions of higher education, devoted to transforming the lives of our students, shaping the future of our state and society, and offering programs of national and international distinction in a climate of inquiry, engagement, collegiality, diversity, and achievement.

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.

University History

Florida State University, one of the largest and oldest of the eleven 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 12 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, Licentiate 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 The 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, 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. It has expanded from the original few acres and buildings to 533 buildings on nearly 1,590 acres, including the downtown Tallahassee main campus of 446 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 years after its founding, Florida State University started the 2011-2012 academic year with a student population of over 41,000 and recognition as a major graduate research institution with an established international reputation.

In Fall 2011, Florida State University enrolled students from all 50 states, the District of Columbia, and 129 foreign countries. The enrollment breakdown by class included 734 law students, 476 medical students, a total of 31,851 undergraduate students, a total of 8,486 graduate students, and a total of 1,373 non-degree seeking students. Out of 41,710 students enrolled at the University that semester, 45.1 percent were men and 54.9 percent women. The University employed a total of 2,306 faculty members in Fall 2011, 58.3 percent men and 41.7 percent women.

The Panama City Campus is located on beautiful North Bay, 100 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 eleven 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) coordinates the State University System. The SBOE and FBOG oversee the 13-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. Additional program opportunities include Spring, Summer and Fall semesters at our four study centers, short Summer terms in additional locations, First Year Abroad for incoming freshmen, international internships, and College for High School for students wishing to experience studying abroad while still in high school. The year-round study centers are located in Florence, Italy; London, England; Panama City, The Republic of Panama; and Valencia, Spain. Summer program locations include Argentina, Australia, Bahamas, Brazil, China, Costa Rica, Croatia, Czech Republic, Ecuador, France, Israel, Peru, Russia, South Africa, Switzerland, Turkey, and Uruguay.

The chief executive officer of Florida State University is the President. He is assisted by the Provost (who is also the Executive Vice President for Academic Affairs), the Dean of the Faculties and Deputy Provost, the Senior Vice President for Finance and Administration, the Vice President for Planning and Programs, the Vice President for Student Affairs, the Vice President for Research, the Vice President for University Relations, the Vice President for University Advancement, and the President of the Faculty Senate.

The Division of Academic Affairs is responsible for the operation of the academic program of the University. It includes the Office of the Dean of the Faculties and Deputy Provost, 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 Relations 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. University Relations also coordinates programs to improve understanding and support of University academic programs and activities through its units, including governmental relations.

University Communications reports to the Division of University Relations, 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 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 a hundred miles west of Tallahassee on beautiful North Bay, the Panama City campus provides opportunities for undergraduate and graduate study in sixteen programs leading to the bachelor's degree and eight programs leading to the master's degree.

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 seventeen colleges and schools. 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 in arts (AA) certificate, the University offers 88 authorized baccalaureate degree programs covering 221 fields, 117 authorized master's degree programs covering 243 fields, 24 authorized advanced master's and specialist degree programs covering 34 fields, 2 authorized professional degree programs covering 11 fields, and 77 authorized doctoral degree programs covering 149 fields. The following outlines the academic divisions:

College of Applied Studies

Programs: 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; Geophysical Fluid Dynamics; History and Philosophy of Science; Interdisciplinary Humanities; Molecular Biophysics; Neuroscience; Women's Studies

College of Business

School: Dedman School of Hospitality

Departments: Accounting; Finance; Management; 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 Library and Information Studies

College of Criminology and Criminal Justice

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

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

The Graduate School

Interdisciplinary Programs: Materials Science; Materials Science and Engineering

College of Human Sciences

Departments: Family and Child Sciences; Nutrition, Food and Exercise Sciences; Retail Merchandising and Product Development

Interdisciplinary Program: Law and Family and Child Sciences

College of Law

Interdisciplinary Programs: Law and Business Administration; Law and Economics; Law and Family and Child Sciences; Law and Information Studies; Law and International Affairs; Law and Public Administration; Law and Sport Management; Law and Urban and Regional Planning; Law and Social Work

College of Medicine

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; Center for Demography and Population Health; Criminology and Public Administration; Economics and Law; Environmental Studies; International Affairs; International Affairs and Law; Latin American and Caribbean Studies; Program in Social Science; Public Administration and Law; Public Administration and Social Work; Public Health; Russian and East European Studies; 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 Program: Law and Social Work; Social Work and Business Administration; Social Work and Criminology; Social Work and Public Administration

College of Visual Arts, Theatre and Dance

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

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

Interdisciplinary Program: Arts 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 State Board of Education's 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

Learning Systems Institute

Institute of Science and Public Affairs

Beaches and Shores Resource Center
Center for Biomedical and Toxicological Research and Hazardous Waste Management
Center for Economic Forecasting and Analysis
Center for Higher Education Research, Teaching and Innovation (CHERTI)
Center for Information Management and Educational Services (CIMES)
Center for Prevention and Early Intervention Policy
Center for the Advancement of Human Rights
Center for the Advancement of Learning and Assessment (CALA)
Florida Conflict Resolution Consortium
Florida Resources and Environmental Analysis Center (FREAC)
Florida State Climate Center
Institute for Academic Leadership
Institute for Cooperative Environmental Research (ICER)
Czech/American Joint Center for Environmental Research
Hungarian/American Joint Center for Environmental Research
Polish/American Joint Center for Environmental Research
Russian/American Joint Center for Environmental Research
Institute of Science and Public Affairs (ISPA)
John Scott Dailey Florida Institute of Government
The Florida Center for Prevention Research

International Programs

Florida–Costa Rica Linkage Institute (FLORICA)

College of Applied Studies

Science, Technology, Engineering and Mathematics (STEM) Institute

College of Arts and Sciences

Antarctic Marine Geology Research Facility
Center for Humanities and Society
Center for Ocean-Atmospheric Prediction Studies (COAPS)
Center for Security and Assurance in IT (C-SAIT)
Geophysical Fluid Dynamics Institute (GFDI)
Institute for Cognitive Sciences
Institute for Fishery Resource Ecology (IFRE)
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 Studies Center
Statistical Consulting Center
Terrestrial Waters Institute
Winthrop-King Institute for Contemporary French and Francophone Studies

College of Business

BB&T Center for Free Enterprise
Carl DeSantis Center for Executive Management Education
Center for Information Systems Research
Center for Insurance Research
Human Resource Management Center
International Center for Hospitality Research and Development
Jim Moran Institute for Global Entrepreneurship
Real Estate Research Center
The Florida Catastrophic Storm Risk Management Center
The Gene Taylor/ Bank of America Center for Banking and Financial Studies
The Marketing Institute

The Sales Institute

College of Communication and Information

Center for Hispanic Marketing Communication
 Communication and Early Childhood Research and Practice Center
 Communication Research Center
 FSU Project Management Center
 Information Use Management and Policy Institute
 Institute for Digital Information and Scientific Communication
 Institute for Intercultural Communication and Research (with the Center for Global Engagement)
 PALM (Partnerships Advancing Library Media) Center
 L.L. Schendel Speech and Hearing Clinic

College of Criminology and Criminal Justice

Center for Criminology and Public Policy Research

College of Education

Adult Learning and Evaluation Center (ALEC)
 Center for the Study of Technology in Counseling and Career Development
 Hardee Center for Leadership and Values

FAMU-FSU College of Engineering

Aeropropulsion, Mechatronics, and Energy (AME) Center
 Center for Intelligent Systems, Control and Robotics (CISCOR)
 Energy and Sustainability Center
 Florida Center for Advanced Aero-Propulsion (FCAAP) Technologies
 High Performance Materials Institute

College of Human Sciences

Center for Advancing Exercise and Nutrition Research on Aging
 Center for Couple and Family Therapy
 Center for Retail Merchandising and Product Development
 Center on Better Health and Life for Underserved Populations
 Florida State University Family 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 Innovative Collaboration in Medicine and Law (joint with the College of Law)
 Center for Rural Health Research and Policy
 Center for Strategic Public Health Preparedness
 Center for Universal Research to Eradicate Disease (CURED)
 Center of Excellence for Patient Safety
 Center on Global Health
 Center on Medicine and Public Health
 Institute of Sports Sciences and Medicine (joint with the College of Human Sciences)

College of Music

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

College of Social Sciences and Public Policy

Center for Civic and Nonprofit Leadership
 Center for Demography and Population Health
 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
 Florida Public Affairs Center
 Gus A. Stavros Center for the Advancement of Free Enterprise and Economic Education
 LeRoy Collins Institute
 Pepper Institute on Aging and Public Policy

College of Social Work

Institute for Family Violence Studies
 Institute for Social Work Research
 Trinity Institute for the Addictions

College of Visual Arts, Theatre and Dance

Maggie Allesee National Center for Choreography

Office of the Vice President for Research

Center for Advanced Power Systems (CAPS)
 Florida Climate Institute (FCI)
 Future Fuels Institute
 Institute for Energy Systems, Economics and Sustainability (IESES)

Office of the Vice President for Student Affairs

Florida Center for Interactive Media (FCIM)

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 new 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:

Professional Development/Personal Enrichment. CAPD Online offers Webmaster certification; the Certificate in Financial Planning; building code and accessibility training; and continuing legal education. These courses are instructor-led and offer an online interactive experience.

Face-to-Face Courses. CAPD also offers face-to-face courses, such as the Writing Certificate Program; Test Prep Classes for the GMAT, GRE, and LSAT; ArcGIS; and fitness classes.

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 broader horizons.

The Florida State Conference Center

In December 2009, the new Augustus B. Turnbull III Florida State Conference Center reopened at its 555 West Pensacola St. location, adjacent to FSU's newest five-story St. Augustine parking garage. The new 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. The new FSU Conference Center 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 Center has retained its name, honoring FSU Provost Gus Turnbull, who died of cancer in 1991.

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/conference/>.

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 Visual Arts, Theatre, and Dance 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.

FSU—Panama

Rector: Carlos R. Langoni

Florida State University's Office of International Programs administers a permanent campus of approximately 400 full-time students in the Republic of Panama. Offering a full program of courses at the lower-division level and selected majors, FSU-Panama offers the associate and the bachelor's degrees. 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 US 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://www.fsu.edu/panama>, write to the International Programs office at 45500 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 certificate is offered for graduate study in cognitive sciences.

Learning Systems Institute

Director: Laura Lang; **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 \$400 million in externally funded research over its 43-year history, providing 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.

LSI is organized into six centers:

- Florida Center for Reading Research (FCRR)
- Florida Center for Research in Science, Technology, Engineering, and Mathematics (FCR-STEM)
- Center on Leadership and Learning
- Human Performance Research Center
- Center for International Studies in Educational Research and Development
- Partnerships Advancing Library Media (PALM Center)

LSI's learning research focuses on assessment, accommodations, and modifications for students with special needs, communities of instruction, learning technologies, international development, leadership, learning disabilities, libraries, literacy, school reform, STEM (science, technology, engineering, and math), and teaching and learning. LSI's research into human performance, how people can do better at specific tasks or jobs, focuses specifically on expert performance, performance improvement, knowledge communities, and team cognition and performance.

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

Libraries

Dean of the University Libraries: Julia Zimmerman, 305 Strozier Library

University Libraries provides collections, resources and services to enhance the learning, teaching, research, and service activities of the Florida State University. In support of this mission, the libraries' collection is approaching 3 million volumes. For those researchers unable to visit the libraries, the Web site offers access to hundreds of databases and more than 70,000 e-journals from anywhere in the world. Materials not available online or at the libraries may be requested through interlibrary loan or through the new statewide UBBorrow system, allowing FSU faculty and students to request delivery of books from over 15 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 eight libraries on campus: Strozier Library, Dirac Science Library, Claude and Mildred Pepper Library, College of Music Allen Music Library, School of Library and Information Studies Goldstein Library, College of Law Research Center, College of Medicine Maguire Medical Library, and the FAMU-FSU College of Engineering Library. The Special Collections and Archives division of University Libraries supports and advances research, teaching, and scholarship by acquiring, preserving, and providing access to collections of original manuscripts, rare books, and university archives for use by students, faculty, and researchers worldwide. The Claude Pepper Library and the Heritage Protocol archives are part of University Libraries' Special Collections.

Library materials and services are also available at the FSU Panama City (Florida) campus, as well as at FSU International Programs study centers in London, Florence, and Panama. The John and Mable Ringling Museum of Art in Sarasota, Florida, has a library containing art-related research materials as well as a collection of rare books. 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 134 hours each week, providing around the clock research assistance and study spaces, and sees almost 1.5 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 lab and digital media center, Strozier provides equipment, soft-

ware, and facilities for listening to, viewing, and editing multimedia materials. Internet-accessible computers with word-processing software, printers, and photocopiers are available throughout the library. The Assistive Technology Lab provides adaptive equipment and software for students with disabilities.

University Libraries Special Collections and Archives has offices, an Exhibit Room, and a Reading Room in Strozier Library. 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, cuniform, 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 and Mildred 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) including manuscripts, photographs, audio/video recordings, and memorabilia. For more information, go to <http://claupeppercenter.net>.

The **Paul A. M. Dirac Science Library**, located in the heart of the Science Center complex, consolidates the University libraries' scientific and technical books and periodicals in one central location. The library's Web site is located at <http://www.lib.fsu.edu/about/fsulibraries/dirac>.

The **Warren D. Allen Music Library**, located in the College of Music and one of the Southeast's major music libraries, contains a collection of recordings, scores, books, and periodicals that support the school's curriculum. The library's Web site is located at <http://www.music.fsu.edu/Quicklinks/Music-Library>.

The **Harold Goldstein Library**, located in the School of Library and Information Studies, contains a collection of professional library science materials and reference materials, as well as juvenile materials and picture books. For more information, go to <http://slis.fsu.edu/About-The-School/The-Goldstein-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 complemented by an array of electronic databases, including the LexisNexis and WESTLAW legal research databases. The library's Web site is located at <http://www.law.fsu.edu/library/>.

The **College of Medicine Charlotte Edwards Maguire Medical Library** provides access to a number of electronic medical databases and a collection of books and journals. To cultivate physicians who are expert learners, problem solvers, and agents of change, the library provides a supportive environment with access to high quality, relevant, and current information from 21st century information resources. The library's Web site is located at <http://www.med.fsu.edu/library/>.

The **John and Mable Ringling Museum of Art Library** is housed on the Ringling Museum Campus in Sarasota, Florida, the largest museum/university complex in the nation. The library contains more than 75,000 volumes, exhibition and sale catalogs, and more than 100 current periodical titles supporting art-related research. Special collections contain circus history items including John Ringling's original collection of more than 600 books. The library's Web site is located at <http://www.ringling.org>.

The **FSU-Panama City (Florida) Library and Learning Center** provides computers, e-books, e-journals, and research help. The 6,000 items in its collection of printed books and journals are available at the Gulf Coast State College Library. For more information, go to <http://pc.fsu.edu/QUICK-LINKS/Current-Students/Library-and-Learning-Center>.

The **FSU Panama Branch Library** offers services and a collection of over 45,000 items to students at the FSU branch campus in Panama City, 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, go to <http://www.lib.fsu.edu/panama/index.html>.

L.L. Schendel Speech and Hearing Clinic

Director of Clinical Education: Lisa Scott

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).

Office of Distance Learning

Director: Susann Rudasill; **Associate Director:** Jean-Marc Wise

The Florida State University Office of Distance Learning (ODL) provides leadership, policy guidance, faculty support and development, and other resources to promote, implement, facilitate, and assess University initiatives related to teaching enhancement and technology mediated learning environments that support student academic achievement. ODL faculty and staff members collaborate with distance learning faculty and teaching assistants to promote instructional excellence at Florida State University through the use of effective educational and communications technologies, evidence-based instructional principles and strategies, and research studies on teaching innovations. ODL is online at <http://distance.fsu.edu>.

Blackboard Learning Management System

Blackboard™ serves as the learning management system for the FSU community. Serving over 40,000 students, <http://campus.fsu.edu> receives over 38,000 unique visitors each school day. Blackboard enables integration and educational innovation at FSU by connecting people to- and through- instructional technology.

The Blackboard team works with support systems and resources from multiple units around campus to integrate learning technology with other applications, ensuring a more efficient operation for all users. ODL developers work with academic and administrative units to extend the functionality and features of Blackboard in order to enhance the teaching and learning experience.

Online Course Development and Faculty Support

Degree programs that are to be offered online at a distance are developed for online delivery through ODL. Instructional design, media support, Blackboard training, teaching enhancement, auxiliary budget management, guidance through administrative procedures and program marketing are provided for courses and programs offered through FSU Online.

Online Programs and Student Support (FSU Online)

FSU Online provides personalized attention for off-campus learners by supporting online academic degree programs, applications, tuition and financial aid, and student support. Florida State University offers a wide variety of online undergraduate and graduate degree and certificate programs. Current program areas include Business, Communication Disorders, Computer Science, Criminology, Education, Information Studies, Interdisciplinary Social Science, Management Information Systems, Nursing, Public Safety and Security, and Social Work. ODL staff members provide personal, ongoing educational support to distance learners across the nation throughout their entire tenure at the University. From the prospective student's initial inquiry about a program to his or her final semester, the ODL Online staff are on hand to guide, advise, and assist.

Students enrolled in online classes at FSU are just a click away from contacting their instructor, class mentor, and other students to ask questions or provide comments. Communication between instructor and students is a central feature of the FSU Blackboard system for all online courses; and for technical issues, assistance is always available through the FSU help-desk system.

A large university setting can be daunting, but when it comes to issues of admissions, registration, orientation, and academic advising, ODL provides a centralized resource to help students get the proper information so they can concentrate on coursework. For more information, please visit our Web site at <http://online.fsu.edu> for initial and ongoing program inquiries and tracking, e-mail inquiries@campus.fsu.edu, or call (850) 645-0393.

Assessment and Testing

ODL Assessment and Testing provides testing, scanning, and evaluation services. Services include: secure exam proctoring for large enrollment, hybrid, and online courses; coordination of remote proctoring services; admin-

istration of departmental, state, and national computer-based tests; scanning, scoring, and reporting of mark-sense forms; and support for online and paper-based course evaluations. You may watch a short video overview of services at <http://distance.fsu.edu> (select Assessment and Testing, then Overview of Services).

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. 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 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://www.fsu.edu/~rotc>, 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 <http://www.fsu.edu/~armyrotc/>, call (850) 644-8806, or visit in person at 201 Harpe-Johnson Hall.

Graduate Education

Dean of the Graduate School: Nancy Marcus, 314 Westcott Building

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, as well as 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 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 Dean of the Faculties 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 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 8,500 graduate and professional students enrolled at Florida State University. These students come from approximately 132 foreign countries and all 50 states.

The Graduate School administers the interdisciplinary master's program in Materials Science and the PhD program 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 100 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, so-

cial 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.

Graduate Life

Located in the center of Tallahassee, the state capital, Florida State University is well known for its beauty. Familiarly known in its beginning years as the College of the Pines, it still retains its unique mixture of Southern ease with Florida exotic. Collegian Gothic structures are combined with modern architecture set in a landscape of rolling hills with pines, palms, dogwoods, and live oaks draped with Spanish moss. Flowering shrubs provide year-round color. Nearby a national forest, a wildlife refuge, lakes, rivers, and the Gulf of Mexico beaches offer opportunities for numerous outdoor pursuits.

The cultural appeal of the University is evidenced through special programs in the arts, including productions from several University and local theaters, operatic and musical (symphonic to jazz) offerings, and art exhibits. Campus recreational opportunities include, for example, the Leach Fitness and Wellness Center (e.g., gymnasium, indoor track, racquetball); over 40 sports clubs (e.g., Martial Arts); Morcom Aquatics Center; Seminole Golf Course; and the FSU Reservation where students can canoe, kayak, picnic, rock climb, and swim. There are over 400 student organizations at FSU, many of which attract graduate students. The Congress of Graduate Students (COGS) is the official representative body of all post-baccalaureate non-degree seeking, master's, specialist, professional, and doctoral students at Florida State. For those who enjoy sports, many of the University's intercollegiate athletic teams regularly rank nationally.

Faculties

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 included six Nobel laureates, seventeen members of National and Foreign Academies, two Pulitzer Prize winners, and twenty recipients of a Guggenheim. Many of its members have received national and international recognition, and the University enjoys national ranking in a number of disciplines. 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 the back of this *General Bulletin*.

Affiliations

The University participates in the Traveling Scholar Program (for graduate students), Academic Common Market, and Cooperative Programs within the State of Florida, Division of Colleges and Universities. 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; the State University System's Institute for Oceanography; the University Space Research Association; and CAUSE: The Association for the Management of Information Technology in Higher Education.

Accreditation

Florida State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate, baccalaureate, masters, specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 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 2010 report, The Carnegie Foundation classified Florida State University in the Research Universities—Very High Research Activity category, its highest category for a graduate-research university. Florida State University is one of 108 American universities to have earned this designation at that time. In addition, the 2010 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.

ADMISSIONS

Director of Admissions: Janice Finney

Senior Associate Director: Hege Ferguson

Associate Directors: Donna Bostwick, Amelia Mann, Leah Paul

Assistant Directors: Melanie Booker, Lori Hamilton, DeMeatrice Johnson, Josh Stanek

Panama City Campus Associate Director: Andrew Konapelsky

General Information

Florida State University encourages applications for admission from qualified students regardless 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 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/graduate>. 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 (FSUSN).

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 Online Status Check (OSC), 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 OSC, the Office of Admissions should be notified immediately. A change in term will result in the reevaluation 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 the evaluation be done by a member of the National Association of Credential Evaluation Services or the International Education Credential Services provided by the American Association of Collegiate Registrars and Admissions Officers.

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 may 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 submit information regarding immunizations, health history, and proof of adequate health insurance coverage. For information regarding these requirements, refer to <http://www.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 graduate application is available online at <http://admissions.fsu.edu/graduate>. 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 at <http://fees.fsu.edu>. 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

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 transcripts 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.

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 Michigan English Language Assessment Battery (MELAB). 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 other possible departmental requirements, such as departmental application, statement of purpose (letter of intent), resumé 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:

- An earned 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, or 77 on the MELAB examination. Some departments may require a higher score. International students expecting to receive appointments as teaching assistants are required to pass a test of spoken English, SPEAK, that 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 as a teaching assistant; however, some departments may still require that the student take the SPEAK.

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 must achieve a score of 1000 on the combined verbal and quantitative portions of the Graduate Record Examinations (GRE) or pass all four sections of the General Knowledge Exam of the Florida Teacher Certification Exam (FTCE). Please note that the scoring system for the GRE has changed and new admission standards are being developed. Until new standards are set, new scores will be converted to the old scale.

All 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 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.

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.

Provisional Graduate Students

Under certain conditions, an academic program may recommend that a student be admitted to the University as a provisional graduate student. The student will be in this provisional category for only one term, and must meet the conditions stipulated by the academic program to be formally admitted the following term. Students entering the University under this category will register in the same manner as degree-seeking students.

A provisional graduate student who meets minimum University admission requirements (see 'Graduate Student Admission Policies' in this chapter) will be reviewed for formal admission for the semester following the provisional term. A provisional graduate student who does not meet minimum University

admission requirements must take at least nine semester hours of graduate-level coursework (excluding S/U courses) while in provisional status, and must earn a 3.0 average on all graduate work taken, in order to be admitted to regular graduate status. A provisional student not meeting minimum University admission requirements must be counted as an exception when admitted to regular graduate status.

A provisional graduate student is subject to the retention and dismissal regulations appropriate to a regular graduate student. A provisional graduate student will be changed to non-degree seeking after incurring probationary status, and the permanent record will retain the probationary status statement but the student will not be subject to further retention review as a provisional student. A provisional graduate student who is changed to non-degree status who subsequently seeks admission to regular graduate status must comply with the policies established for non-degree students who change to regular graduate student status. For information on non-degree classification, see the subsection on 'Non-Degree Students' in this chapter.

Graduate work while in provisional status will automatically apply toward the student's graduate program if the student changes directly from provisional to regular student classification, unless the academic dean directs to the contrary. Graduate work taken by a provisional graduate student who changes to non-degree shall be considered as acquired while in non-degree status. The subsequent transfer of such credit to a graduate program shall be subject to the policies of reclassification from non-degree to regular student status.

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, should submit an application for readmission to the Office of Admissions. Academically dismissed students are not eligible for readmission to continue 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 at least two months prior to the beginning 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 re-establish 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 shall 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 Office of Admissions.

Readmission after Multiple Withdrawals

When a student has withdrawn from the University three or more times, subsequent readmission will first be considered by a committee whose charge 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.

Non-Degree Student Regulations

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 nonrefundable \$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. Deadline dates are two months prior to the beginning of each term. (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://www.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 transient student. Transient students must receive prior approval from their graduate deans for the courses to be taken 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 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 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 on the home campus, such as special course offerings, research opportunities, unique laboratories, and library collections.

A traveling scholar's graduate adviser 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 adviser and the faculty member at the host institution, graduate deans of both institutions will be fully informed by the adviser 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 at 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 the University Registrar 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 about Florida State University programs participating in the Academic Common Market, contact the Academic Common Market Coordinator, 115 Westcott, (850) 644-6876.

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 Online Status Check, the Office of Admissions should be informed immediately. If the student wishes to be reconsidered for a different term, the Office of Admissions must be advised.

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://www.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.

A number of international students arrive at the University without being aware of the amount of money they will need. 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 <http://cge.fsu.edu/news-tudents/cfr.cfm>. These estimates are for unmarried students with no dependents. Additional funds must be included for spouse and/or family (\$5,000 for spouse and \$3,000 for each child per year).

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 that 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://www.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 ever had tuberculosis (or scars appearing on chest X rays) or other serious infectious diseases, they must have a thorough medical examination made before coming to the University, and must bring the 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://www.cies.fsu.edu>.

Admission to the Frederick L. Jenks Center for Intensive English Studies does not guarantee admission to Florida State University after the successful completion of English studies.

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 the CGE Web site at <http://www.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, Florida State University, 4750 Collegiate Drive, Panama City, FL 32405-1099*, or apply online at <http://www.pc.fsu.edu>. (International applicants cannot be considered for admission to the Panama City campus.)

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

The deadline for applications and supporting documents at the FSU Panama City campus is August 1st for Fall term, December 1st for Spring term, and April 1st for the Summer term. Further information is available by calling the Panama City Office of Admissions at (850) 770-2160.

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://www.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>.

FINANCIAL INFORMATION, TUITION, FEES, AID, SCHOLARSHIPS, AND EMPLOYMENT

University Controller: Michael Williams; **Associate Vice President for Budget, Planning, and Financial Services:** Rafael Alvarez; **Director, Office of Student Financial Services:** John Bembray

General Information

Tuition and fees are collected by the University Controller's Office of Student Financial Services. Payment of registration fees and tuition detailed below is an integral part of the registration process. Academic progress will be stopped and official University documents and services (transcripts, diplomas, registration, etc.) withheld if tuition and fees are not paid within the established time frame listed.

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://controller.vpfa.fsu.edu/Student-Financial-Services/SFS-For-Students/Tuition-Rates/Main-Campus>.

Tuition Payments and Arrangements. The student's Web name and password are required to access the Online Account Statement at <http://campus.fsu.edu> (from *Secure Apps*, click *My Account Statement*). Tuition and fees are due according to the posted deadline at <http://www.sfs.fsu.edu>. Financial aid is disbursed during the second week of the semester, and as received 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, and Veteran's deferments are due by the third day of each semester. State employee tuition vouchers are due on the fifth day of the 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 *My Account Statement* at <http://campus.fsu.edu> (from *Secure Apps*) 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 arrangements outstanding. Credit and debit card payments can be made through the Internet at <http://www.fees.fsu.edu>. **Students who do not pay tuition and fees or make payment arrangements by the established deadline 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: *Controller's Office, 4750 West 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 via the Internet at <http://www.fees.fsu.edu>. There is a \$7.00 nonrefundable fee for each online transaction. Accepted forms of online payment: American Express, Discover, MasterCard, Visa, and electronic checks. For further information, please call (850) 770-2120 or e-mail cashier@pc.fsu.edu.

Residency Requirements for Tuition Purposes

At Florida State University there are four offices responsible for the review of residency for tuition purposes under Section 1009.21, Florida Statutes, and Florida State University Regulation 6C2R-2.02416. These offices are: (1) the Office of Admissions, (2) College of Law Admissions, (3) College of Medicine Admissions, and (4) the Office of the University Registrar. The first three offices determine residency for all first-time-on-campus students; the Office of the University Registrar is the only office to which students can apply for changes in residency once they are enrolled. First-time-on-campus or returning students will be classified in accordance with the information on their applications, including the "Florida Resident Affidavit," providing no other information is available calling into question the information on the application.

To qualify as a Florida resident for tuition purposes in accordance with Florida State University Regulation 6C2R-2.02416, students must be: United States citizens, lawful permanent residents, or aliens lawfully present in the United States who are in an eligible visa category,

AND

Have established a legal residence in this state and maintained that legal residence for 12 months immediately prior to the term in which they are seeking Florida resident classification. **Students' residence in Florida must be as a bona fide domicile rather than for the purpose of maintaining a mere**

temporary residence or abode incident to enrollment in an institution of higher education, and should be demonstrated as indicated below (for dependent students as defined by Internal Revenue Service regulations, a parent or legal guardian must qualify);

AND

Submit two or more of the following documents (or in the case of a dependent student, the parent or legal guardian must submit documentation) prior to the first day of classes for the term for which resident status is sought for initial enrollment. (**Note:** The various Summer sessions are considered one semester for the purpose of establishing residency):

Documents must include at a minimum one of the following:

- Documentation establishing bona fide domicile in Florida that is not temporary or merely incident to enrollment in a Florida institution of higher education. This information must be dated at least one year prior to the first day of classes of the term for which resident status is sought. The following documents will be considered evidence of domicile even though no one of these criteria, if taken alone, will be considered as conclusive evidence of domicile:
 - Declaration of Domicile in Florida.
 - Florida voter's registration card.
 - Florida driver's license, or State of Florida identification card.
 - Florida vehicle registration.
 - Proof of a permanent home in Florida which is occupied as a primary residence in Florida, or proof of homestead exemption.
 - Transcripts from a Florida high school for multiple years (two or more) if the Florida high school diploma or GED was earned within the last 12 months.
 - Verification of permanent, full-time employment in Florida for at least 30 hours per week for the 12-month period by the employer, employment records, or other employment-related documentation (e.g., W-2, paycheck receipts), other than for employment normally provided on a temporary basis to students or other temporary employment.

Documents may include one or more of the following:

- A Florida professional or occupational license.
 - Florida incorporation.
 - Documentation evidencing family ties to individuals who claim Florida as their primary residence.
 - Proof of membership in a Florida-based charitable or professional organization.
 - Proof of continuous presence in Florida during periods when not enrolled as a student during the 12 months prior to the term of enrollment.
 - Proof of reliance upon Florida sources of support.
 - Any other factors peculiar to the individual that tend to establish the necessary intent to make Florida a permanent home and that the individual is a bona fide Florida resident, including the age and general circumstances of the individual.
- No contrary evidence establishing residence elsewhere.
 - Documentation of dependent/independent status (copy of Internal Revenue Service tax return).

Note: Federal income tax returns filed by resident(s) of a state other than Florida disqualify such students for in-state tuition, unless said student's parents are divorced, separated, or otherwise living apart and either parent is a legal resident of Florida.

OR

Become a legal resident and be married to a person who has been a legal resident of the state of Florida for the required 12-month period [s.1009.21(5), FS];

OR

Be an active-duty member of the Armed Services of the United States residing or stationed in Florida (and spouse/dependent children) or an active drilling member of the Florida National Guard or military personnel not stationed in Florida whose home of record or state of legal residence certificate, DD Form 2058, is Florida (and spouse/dependent children) [s.1009.21(10)(a), FS];

OR

Be a full-time instructional or administrative personnel member employed by a state public school or institution of higher education (and spouse/dependent children) as defined in s.1009.21(1)(c), FS and s.1009.21(10)(d), FS;

OR

Be an active-duty member of the Armed Services of the United States residing (and spouse/dependent children) attending a public college or university within 50 miles of the military establishment where the member is stationed, if such military establishment is within a county contiguous to Florida [s.1009.21(10)(b), FS];

OR

Be a dependent who has lived five years with an adult relative who has established legal residence in Florida [s.1009.21(4), FS];

OR

Be a person who was enrolled as a Florida resident for tuition purposes at a Florida public institution of higher education, but who abandoned Florida residency and then reenrolled in Florida within 12 months of the abandonment—provided that the person continuously maintained the reestablished domicile during the period of enrollment (this benefit only applies one time) [s.1009.21(9), FS];

OR

Be a Latin American/Caribbean scholar [s.1009.21(10)(e), FS];

OR

Be a United States citizen living on the Isthmus of Panama who has completed twelve consecutive months of college work at the Florida State University Panama Canal Branch (and spouse/dependent children) [s.1009.21(10)(c), FS];

OR

Be a graduate student of the Southern Regional Education Board's Academic Common Market attending one of Florida's state universities [s.1009.21(10)(f), FS];

OR

Be a full-time employee of a state agency or political subdivision of the state whose student fees are paid by the state agency or political subdivision for the purpose of job-related law enforcement or corrections training [s.1009.21(10)(g), FS];

OR

Be a qualified beneficiary under the Florida Prepaid College Program (prepaid ID card required) [s.1009.98, FS];

OR

Be a McKnight Fellowship recipient [s.1009.21(10)(h), FS];

OR

Be an active-duty member of the Canadian military residing or stationed in Florida under the North American Air Defense (NORAD) agreement (and spouse/dependent children) attending a public college or university within 50 miles of the military establishment where the member is stationed [s.1009.21(10)(j), FS];

OR

Be a U.S. citizen living outside the United States who is teaching at a Department of Defense Dependent School or at an American International School and who enrolls in a graduate-level education program that leads to a Florida teaching certificate [s.1009.21(10)(i), FS];

OR

Be an active-duty member of a foreign nation's military who is serving as a liaison officer and is residing or stationed in Florida (and spouse/dependent children) attending a public college or university within 50 miles of the military establishment where the member is stationed [s.1009.21(10)(k), FS];

OR

Be a linkage institute participant receiving partial or full exemptions under s.1009.21, FS, based on criteria approved by the Florida Department of Education per s.288.8175, FS, which establishes linkage institutes between postsecondary institutions in this state and foreign countries (s.288.8175(6), FS);

AND

Make a statement as to the length of residence in Florida and qualification under the above criteria. Students wishing to change from out-of-state to in-state residency for tuition purposes shall apply to the appropriate admissions office if they have not yet enrolled or if they are seeking readmission, or to the University Registrar if they are already enrolled and are seeking to be reclassified. **Note:** Florida Statute 1009.21 requires students to present additional

documentation beyond that required for initial classification. For additional information on residency guidelines, refer to <http://admissions.fsu.edu/residency> or the "Applying for College" link at <http://facts.org>.

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://sfs.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. **Fees applicable to 2012-2013 had not been confirmed by the Florida Legislature at the time of the publication of this document.**

Actual Course Fee Charge per Credit Hour 2011-2012 at the FSU Main Campus

Course Level	In-State & Enrolled at FSU Before 7/1/07	Out-of-State & Enrolled at FSU Before 7/1/07	In-State & Enrolled at FSU After 7/1/07*	Out-of-State & Enrolled at FSU After 7/1/07*
0001-4999	\$160.84	\$666.39 *	\$192.84 *	\$698.39 *

*Includes Tuition Differential Fee

Course Level	In State**	Out-of-State**
5000 and above	\$420.78	\$1,052.18
Law	\$610.10	\$1,262.18
Medical per year	\$21,293.18	\$55,844.37
Repeat Course Fee per credit hour (undergraduate only)	\$159.87	\$159.87

**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 2011-2012 at the FSU Panama City Campus

Course Level	In-State & Enrolled at FSU Before 7/1/07	Alabama/Georgia Special Rate* & Enrolled at FSU Before 7/1/07	Out-of-State & Enrolled at FSU Before 7/1/07
0001-4999	\$128.50	\$148.50	\$634.05

*Visit <http://www.pc.fsu.edu/>

Course Level	In-State & Enrolled at FSU After 7/1/07	Alabama/Georgia Special Rate* & Enrolled at FSU After 7/1/07	Out-of-State & Enrolled at FSU After 7/1/07
0001-4999	\$160.50	\$180.50	\$666.05

*Visit <http://www.pc.fsu.edu/>

Course Level	In State	Alabama/Georgia Special Rate*	Out-of-State
5000 and above	\$388.44	\$408.44	\$1,019.84

*Visit <http://www.pc.fsu.edu/>

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 nonrefundable application fee.

Admission Deposit: \$200.00. Admitted freshman and law school students who plan to attend Florida State University must pay a **nonrefundable 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*).

Florida State University Identification Card (FSUCard): \$10.00. This fee is assessed against first-time FSUCard recipients, including high school students. This fee may be paid when tuition is paid.

FSUCard Term Fee: An FSUCard semi-annual fee of \$5.00 applies to all main-campus students each Fall and Spring semester.

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: \$5.00. 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: \$8.40 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://parking.fsu.edu>.

Returned Check Charge/Stop Payment Charge: \$25.00 or five percent 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 Web site, 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 equipment. 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

(All fees subject to change)

	Overdue Fees	Replacement Fees
Books	\$0.25 per day	Billed for replacement cost at 60 days overdue, or damaged
Failure to Return Recalled Items	\$0.25 per day	Billed for replacement cost at 60 days overdue, or damaged
Interlibrary Loan	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	\$10.00 per hour	
Headphones	\$0.25 per hour	Billed for replacement cost if lost or damaged
Study Rooms	\$10.00 per hour	
Study Room Supplies	\$10.00 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 apply 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 2012–2013 academic year and do not include transportation and personal expenses or Summer tuition, and 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>.

Graduate	Florida Residents	Non-Florida Residents
Tuition/Fees ¹	\$11,506	\$26,716
Housing	\$5,888	\$5,888
Food	\$3,932	\$3,932
Books/Supplies	\$1,000	\$1,000
Subtotal	\$22,326	\$37,536
Health Insurance ²	\$1,541	\$1,541
TOTAL	\$23,867	\$39,077

¹ The tuition and fee estimate is based on twelve semester hours for graduate students attending two terms (Fall and Spring) per year at the Tallahassee campus. Refer to the Student Financial Services Web site at <http://sfs.fsu.edu> for tuition rates for all campuses or specific programs.

² Cost 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.

Note: International students should refer to <http://cge.fsu.edu/newstudents/cfr.cfm> for an estimated cost of attendance.

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 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://www.sfs.fsu.edu>. Note that University Housing and 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://campus.fsu.edu> (from **Secure Apps**, click **My Account Statement**) 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 Financial 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 FSUSN, the last four digits of your social security number, or your FSU email 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> or at kiosks located around campus. There is a \$7.00 nonrefundable flat fee for each transaction.

Installment Contracts. The Student Financial Services Tuition Installment Contract is the only form of tuition payment "plan" that the University offers. 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, as specified on the agreement. The installment contract agreement form is online at <http://controller.vpfa.fsu.edu/Student-Financial-Services/SFS-For-Students/Forms>. Follow the instructions for completing the form. The form does not guarantee an Installment Contract and all required steps must be performed before the Contract takes effect. 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 Financial 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 FSUSN, 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 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 FSUSN, the last four digits of your social security number, or your FSU email 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 Financial 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://www.sfs.fsu.edu>. Students who are requesting their tuition 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 Financial 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 Financial 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 Financial Services does not bill agencies for housing, books, meals, etc.

Departmental Billing. Departmental billings must be submitted to the Office of Student Financial 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 Dean of the Faculties at (850) 644-3375; graduate students should contact the Dean of the Graduate School at (850) 644-3500.

State Employee Registration

Full-time state employees may use the state employee tuition waiver to register for Florida State University classes. Registration in classes using the state employee tuition waiver 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: limited access programs; remedial courses; dissertation, thesis, and directed individual study (DIS) courses; internship courses; distance learning courses; online courses; Center for Professional Development (CPD) courses; College of Medicine courses; College of Law courses; all graduate program courses in the College of Business; and other one-to-one instruction courses. 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 the University Registrar **on the fifth day of classes only**. State employee tuition waivers may not be used for any course that is registered for prior to this space-available registration window. Thus, for any class obtained prior to the fifth day of classes, the student assumes personal financial liability for tuition.

Additional restrictions and deadlines apply. See the Office of the University Registrar's Web site at http://registrar.fsu.edu/services/emp_tuit_waive for additional information, including the link to download the State Employee Tuition Waiver form.

Panama City Campus

Students who intend to enroll at the Panama City campus of Florida State University may pay their fees at: *Controller'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>. There is a non-refundable flat fee for each transaction. Accepted forms of online payment include: American Express, Discover, MasterCard, Visa, and electronic checks. For further information, please call (850) 770-2120 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. The **primary plan excludes local fees** (i.e., health, athletics, student activity, laboratory, transportation access, and books) that are to 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 going to <http://campus.fsu.edu> (from *Secure Apps*, click *My Account Statement*). The 2011-2012 local fees, excluding books, not covered by the Prepaid College Program total approximately \$32.04 per hour, plus lab fees ranging from \$3.25 to \$35.00, plus the Transportation Access Fee. **Students using the Florida Prepaid College Program are responsible for paying local fees by the tuition payment deadline of the main campus semester or they will be assessed a \$100 late payment fee. (Rate subject to change.) Fees applicable to the 2012-2013 academic year had not been confirmed by the Florida Legislature at the time this document was published.** Additional information may be obtained by writing: *Florida Prepaid College Program, P.O. Box 6448, Tallahassee, FL 32314-6448* or by calling 1-800-552-4723 or at <http://www.fsba.state.fl.us/prepaid>.

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 under FSU forgiveness that are fee liable. Undergraduate level courses are numbered 1000 to 4999.

Effective Fall 2011 Semester, the repeat course surcharge was \$159.87 per credit hour.

NOTE: The rate is subject to change for the 2012-2013 academic year.

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, Florida 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, participate in graduation ceremonies, receive a diploma, receive an associate in arts certificate, view grades, 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 any amount, 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.

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

In accordance with Florida State University Regulation 6C2R-2.0248, students who do not pay tuition and fees or make arrangements for tuition and fee payment by the published deadline each semester will have their schedules canceled. 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 Financial 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.

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

Students whose schedules are canceled 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 the Fall and Spring semesters (consult the *Registration Guide* for Summer term deadlines). Prior to a student's appeal being approved, the Office of Student Financial 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.

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 have at least a full-time equivalent of one-quarter time on a qualifying assistantship beginning the first day of each academic term and lasting 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 canceled 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 enrollment.** Waivers will not cover any dropped classes. The student will be responsible for the corresponding tuition should a waiver be canceled or revoked. The student will be responsible for any fees assessed.

Florida Residents Over 60 Years of Age

When registering to audit courses not for credit, all fees are waived for citizens 60 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.

Policy Concerning Late Fees

A student may request a waiver of the late registration fee at the Office of the University Registrar. 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 Financial 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 online at <http://campus.fsu.edu> (from *Secure Apps*, click *Late Payment Fee Waiver*). If the request is denied, the student may appeal to the Late Payment Fee Appeals Committee by contacting the Office of Student Financial 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 Financial 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 through the Internet at <http://www.sfs.fsu.edu>.

Deferments and Financial Arrangements

Financial aid is disbursed during the second week of 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 through the Internet at <http://www.sfs.fsu.edu>.

Veterans' Deferments. A student in training under the auspices of the Veterans' Administration receives an education and training allowance each month from the federal government. Since the first subsistence checks are sometimes delayed, it is advisable for the veteran to be prepared to meet all expenses for about two months.

Tuition and health fees for students receiving assistance from the Veterans' Administration in accordance with provisions of Section 1009.27(2), Florida Statutes, may be deferred each time there is a delay in the receipt of benefits. This deferment is not automatic and must be explicitly requested by eligible students through the Office of Veterans' Affairs, Office of the University Registrar, by the fifth day of the semester. Students with financial aid pending will have their tuition paid by their financial aid and will have their veteran's deferments nullified.

Note: If a student receives a veteran's deferment and tuition is still not paid by the deferment expiration date, the student will be assessed a \$100.00 late payment fee and may have his or her course schedule cancelled. Moreover,

such students will not be eligible to receive a veteran's deferment in the future. Registration, transcripts, and diplomas will not be processed until debts are paid in full.

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 freshman applicants who can document that they have received a fee waiver because of economic need as determined by the College Board or the American College Testing Program, or 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.** At the beginning of a semester, refunds will not be processed until the end of the third week of class to ensure that all checks have cleared the bank. 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. The refund will be processed as a credit to the student's FSUCard account for currently enrolled students, unless the student requests a check to be mailed to the address on file. However, payments made by credit card will be refunded to the credit card. Checks will be mailed to those students who are no longer enrolled. Refund request forms are available at the Office of Student Financial Services, *A1500 University Center* or online at <http://controller.vpfa.fsu.edu/Student-Financial-Services/SFS-For-Students/Forms>.

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 [25%] of the term) are eligible for a twenty-five percent (25%) 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 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:

- **Tuition Fees.** Office of Student Financial Services, *A1500 University Center*; <http://www.sfs.fsu.edu>
- **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 Parking, *C2300 University Center*
- **Textbooks.** Manager of Florida State University Bookstore, *Parking Garage, Main Level*

Withdrawal and Return of Financial Aid

Effective Fall 2000, students who withdraw and have received financial aid will be required to repay to the program source the amount of **unearned** financial aid funds disbursed to them as of their withdrawal date. Programs include Pell Grants, Perkins Loans, Supplemental Educational Opportunity Grants (FSEOG), Stafford Loans (subsidized and unsubsidized), Parent Loans (the Federal PLUS program), Plus Loan for Graduate Students (PLUG), TEACH Grant, and other awards. The **unearned** amount of program funds is calculated based on the percentage of the semester completed before the date of withdrawal. Both the University and students receiving financial aid are required to return **unearned** financial aid to the aid source. 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 educationally-related expenses assessed by the institution. The funds returned to the aid source by the University will be credited against the student's total liability of **unearned** funds. However, students will owe the University the amount returned to the aid source for institutional charges. In addition, any student who receives Title IV funds and 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 officially withdraw.

Students must repay the unearned Title IV funds to any Title IV loan program, in accordance with the terms of the loan. For Title IV loan programs, **unearned** grant program funds are considered overpayments, and students are required to return 50 percent (50%) of the grant. 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; or, (2) enters into a repayment agreement with the University. However, 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. **Students should consider their repayment responsibilities for these programs as part of any withdrawal decision. Students should contact the Florida Bright Futures office for the most current restrictions on eligibility.**

Bright Future Repayment Requirement

Section 1009.53, Florida Statute states that Bright Future scholarship funds may not be used to pay for courses dropped by a student after the end of the drop/add period. This includes all courses dropped as part of the official withdrawal process. Students will be required to reimburse the University for the appropriate Bright Future portion disbursed based on enrollment. A waiver of repayment requirement may be granted in the event of a documented illness or emergency. Appeals to waive the repayment requirement can be made to the Office of Financial Aid.

Student Cancellation of Schedule

A student may cancel registration during the first four days of a semester or Summer session by submitting a written request to the Office of the University Registrar, *A3900 University Center*, or to Withdrawal Services, *A4300 University Center*. Students who cancel their registration within this time frame are not liable for tuition; if tuition has been paid, such students should request a full refund of fees. Beyond the fourth day of the semester, a student cannot voluntarily cancel registration but must apply for withdrawal from the University. Students who cancel their registration and are not enrolled for the following term (not enrolled for two consecutive terms) must apply for readmission.

Financial Aid

Director, Office of Financial Aid: Darryl Marshall

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 awards, 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, she or he can access the financial aid file and monitor its status by visiting <http://www.finaid.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 award may also be found on this site.

The hours of operation for the Office of Financial Aid are 8:30 a.m. to 5:00 p.m., Monday through Friday. Counseling is available by phone at (850) 644-0539 or at the information center Monday through Friday, 8:30 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 <http://www.fafsa.ed.gov>. Graduate fellowships and assistantships are awarded through the Graduate School and the respective academic departments.

Eligibility

Financial aid eligibility requirements normally include a minimum enrollment of twelve semester hours in a degree-granting program. Regulations governing federal and state financial aid programs require that students maintain satisfactory progress and good academic standing to receive financial aid. Twelve hours per semester constitutes a full-time load for graduate students and fellowship holders. Nine hours is defined as a full-time load for graduate assistantship holders on a quarter-time appointment or larger.

Deadlines

The federal financial aid application period for the 2012-2013 year begins January 1, 2012, and ends June 30, 2013. Some federal and institutional grant funds and federal work-study funds are limited, so students are encouraged to apply as soon as possible after January 1, 2012. Estimated student/parent tax data is needed for completion of the FAFSA document until current year taxes are filed. **The University requires a separate application for Summer financial aid.** The Summer application must be accessed through the financial aid student toolkit located on Blackboard, at <http://www.fsu.edu>.

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 directly over the Internet by accessing the following Web page: <http://www.fafsa.ed.gov>.

Internet applications can be completed from any home computer with secure Internet access, or through Internet capable computers in many libraries and schools. Continuing students have access to various computer labs on campus. To apply, the following materials will be necessary to complete the data required:

1. The student's social security card and driver's license
2. W-2 forms or other records of income earned
3. Student's and student's spouse's (if married) Federal Income Tax Return (estimated figures are acceptable for application before filing of return)
4. Records of other untaxed income received, such as welfare benefits, social security benefits, TANF, and military or clergy allowances
5. Current bank statements and records of stocks, bonds, and other investments
6. Business or farm records, if applicable; and
7. 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 January 1), a student cannot be awarded 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 Subsidized Loan, Federal Stafford Unsubsidized Loan, or Federal Perkins 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 Stafford loan or Federal Perkins 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 Florida State University Office of Financial Aid Web page at <http://www.finaid.fsu.edu> and clicking on the loan entrance counseling and master promissory note links. This will connect the student with the official loan entrance counseling and promissory note site, where the required information will be covered. 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. Federal Perkins Loans require an institutional promissory note which can be accessed online at <http://campus.fsu.edu> (from **Secure Apps**, click **Perkins Loan Promissory Note**). 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

The University distributes aid in two ways for all registered financial aid students whose funds are available to the Office of Student Financial Services. Students must complete an Account Refund Setup form online at <http://campus.fsu.edu> (from **Secure Apps**, click **Account Refund Setup**) by choosing one of the following two ways to receive financial aid:

1. By Electronic Funds Transfer (EFT) to your FSUCard Account at Sun Trust. (NOTE: At the time of this publication, the University is negotiating a banking contract and the chosen bank will be published by the FSUCard Center.) The University recommends this method as the most efficient option. Approximately 80% of the student body receiving financial aid at FSU have chosen to process their aid electronically and take advantage of the latest technology in banking services; or
2. By a check mailed to your local address. It is the student's responsibility to keep his or her address record current with Florida State University. Checks are not forwarded by the post office.
3. Exceptions:
 - a. Students who have a hold on their funds must clear it by the posted deadline. Loans must be returned to the lender within twenty days of receipt. The University will make every effort to contact students by phone and e-mail. Students whose aid has not been processed by the end of the second week of the term should contact the Office of Student Financial Services at sfs@admin.fsu.edu or in person at *A1500 University Center*. In order to receive aid, a student must be enrolled for the required number of hours; and
 - b. Students whose financial aid has not arrived by the beginning of the semester should receive a tuition deferment if application was made by August 1 of each year. After the initial distribution dates at the beginning of the semester, additional funds that become available will be disbursed daily and mailed or sent to the FSUCard account in accordance with the selection made on the student's Account Refund Setup form.

The minimum number of hours required to be eligible for financial aid is six semester hours.

All financial aid students must check their financial aid status at <https://campus.fsu.edu> on the scheduled date. If their online billing statement says they have a deferment or their tuition has been paid, they do not need to come to the Office of Student Financial Services. Students should check the status of their financial aid award on the published dates.

Failure to confirm that financial aid has been processed by the deadline may result in a late payment fee assessment of \$100.00. (Rate subject to change.) Students can confirm transactions and account history at <http://campus.fsu.edu> (from **Secure Apps**, click **My Account Statement**).

If you have any questions, please contact the Office of Student Financial Services at (850) 644-9452, via e-mail at sfs@fsu.edu, or on the Web at <http://www.sfs.fsu.edu>.

Deadline: If the financial aid is not sufficient to cover all charges, the student is responsible for paying the balance by the tuition payment deadline (see date on the "Academic Calendar" in this *General Bulletin*). 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 or department billing should submit the required documents no later than the third day of the semester, but preferably immediately after registration. Intern Participation Certificates and the Florida Prepaid College Program do not pay the full amount of tuition. Students must pay the remaining balance due by the tuition payment deadline. All state employee waivers must be turned into the Registrar's office at the University Center on the fifth day of classes

only. Outstanding tuition and charges from a previous semester will be deducted from financial aid received during a current semester, if registration is permitted.

Deferments, Loans, and Check Cancellation

Deferments

Students must confirm their application is complete by the first week of the semester by going to <http://campus.fsu.edu> and viewing their Financial Aid Student Toolkit.

Financial aid deferments will be processed automatically for all financial aid students who meet the following criteria:

1. The student has completed the financial aid application process by the published deadline (indicated in the Financial Aid Application Packet);

AND

2. The student does not have financial aid available during financial aid distribution (the second week of the term).

Financial aid students who do not receive a financial aid deferment must pay their tuition in full by the tuition payment deadline. See the dates published in the "Academic Calendar" included in this *General Bulletin*. 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://campus.fsu.edu> (from **Secure Apps**, click **My Account Statement**). You will then see your courses and fees detailed. With your temporary deferment, your total balance may show "\$zero" (\$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 your financial aid pays your tuition by the deferment deadline. If you have questions, contact us at sfs@fsu.edu or (850) 644-9452. Also, check your financial aid status at <http://www.studentsfirst.fsu.edu>. If the student's aid is not available by the expiration date, it is the student's responsibility to pay tuition in full. 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) online at <http://campus.fsu.edu>. 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 loans. Short Term Loans will be disbursed approximately one business day after the loan has been approved and disbursed according to the disbursement method indicated on the student's Account Refund Setup. 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 make deposits for housing, as financial aid distribution does not take place until the second week of the term.

Emergency Loans

Students who have emergency situations such as death in the family or unexpected major medical or dental bills 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 loans. Loans must be paid by the due date, and University services will not be granted until paid in full.

Check Cancellation

Any 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 (Perkins, GSL, UGSL) prior to it being disbursed to the student. Financial aid is processed at the end of the first week of each semester and it arrives thereafter. If the loan has already been disbursed, the student is

required to notify Student Financial Services in writing within fourteen days that they do not want part or the entire loan they have received. A form can be completed at the Office of Student Financial Services 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 Financial Services, *A1500 University Center*. Students who want to refuse loans after the fourteen-day notification period must contact their lender for repayment.

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. These loans include Perkins (NDSL), Subsidized Stafford (GSL), and Unsubsidized Stafford (UGSL) loans. Failure to complete this procedure will result in the withholding of diploma, transcripts, and other University services. To complete this requirement, students should go to the *Secure Apps* page on Blackboard (<https://campus.fsu.edu>) and select the *Exit Interview for Financial Aid* option. Students will need their user name and password to sign onto the Blackboard session. Students planning to continue their academic studies at Florida State University should contact the Office of Student Financial Services at *A1500 University Center* to ensure that their exit interview stop is removed.

Additional Sources of Financial Support

A listing of additional sources of financial aid such as scholarships or private educational loans can be found on the Financial Aid Web site at <http://www.finaid.fsu.edu>. Individual departments described in the "Academic Departments and Programs" section of this *General Bulletin* list scholarships, as well as assistantships available for students of specific majors.

The Federal Work Study Program (FWSP)

The FWSP is a federally funded financial aid program, administered by the Office of Financial Aid, that enables students to earn a portion of their financial aid award. 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. By federal regulation, the work schedule cannot interfere with a student's class schedule. Federal Work Study is a need-based program, and is awarded on a first-come, first-served basis.

Students may also utilize their Federal Work Study awards 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. Community service improves the quality of life of local residents, as well as encourages student awareness and continued participation in society at large. Students may assist with programs related to health care, child care, 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.

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.

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. For more information please go to the Graduate School Web site at <http://www.gradschool.fsu.edu>.
2. **International Dissertation Semester Research Fellowship.** For advanced doctoral students, \$7,000 and tuition waivers are awarded to help facilitate their research and the timely completion of their doctoral degree, if it requires extended research time abroad. For more information please go to the Graduate School Web site at <http://www.gradschool.fsu.edu>.
3. **McKnight Doctoral Fellowship Program.** This program is for newly enrolling African-American and Hispanic students and includes all academic disciplines except law, medicine, and most fields in education (doctoral students in mathematics and science education are eligible to

apply). Awards are \$12,000 per year plus tuition and fees, renewable for a total of four years. For more information please go to the Graduate School Web site at <http://www.gradschool.fsu.edu>.

External Fellowships

The **Office of Graduate Fellowships and Awards** operates under the auspices of the Graduate School. It assists currently enrolled graduate students in obtaining funding from external sponsors through nationally competitive fellowships and awards. Students may receive advice on their applications and proposals. For more information, visit the office's Web site at <http://ogfa.fsu.edu>.

Assistantships

Graduate assistants are selected by academic departments for duties connected with instruction or research of mutual benefit to the University and the student. Only students with regular graduate student status are eligible for graduate assistantships. 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 request 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 for Minorities** awards \$2,500 per semester, plus an out-of-state tuition and/or matriculation fee waiver for up to two semesters. For more information, please visit the Graduate School Web site at <http://www.gradschool.fsu.edu>.

HOUSING

Director of University Housing: Adrienne Otto Frame, 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, or national origin. Some rooms and apartments are adapted for residents who have physical disabilities.

University facilities on the main campus include two apartment complexes. **Rogers Hall** is an eight-story co-ed residence for single students, and can accommodate 188 residents. The building is equipped with central heating and air-conditioning, and each room is furnished. It is located on the west side of the main campus, well within walking distance to all university buildings. Two students are assigned to each one-bedroom apartment; please note that a limited number of single-occupancy apartments is available. **Sherrill W. Ragans Hall** houses a total of 555 men and women in three- and four-bedroom apartments. Most residents are undergraduates, but a limited number of rooms are reserved for single graduate students. Each apartment has 2 baths, a common study area, living area, and kitchen.

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 use the telephones at the main entrances to request admittance.

Alumni Village

Graduate students, either single or with dependents, are also eligible for housing in Alumni Village, an apartment complex one and a half miles from campus. Alumni Village offers 785 one-, two-, and three-bedroom furnished apartments. Residents have access to a preschool, laundry facilities, a recreation building, and playgrounds on the premises.

Costs

Rogers Hall

Apartments (monthly), per student (including utilities and ethernet access):	\$455.00*
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Alumni Village

One-bedroom furnished apartment:	\$420.00*
Two-bedroom furnished apartment:	\$445.00-\$580.00*
Three-bedroom furnished apartment:	\$660.00*

Note: Monthly rate does not include utilities except garbage collection.

*All housing rental fees are established by The 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. Fees quoted are 2011–2012 figures and are subject to change. 2012-2013 fees were not available at the time of publication.

Applications

Students may apply for housing after notice of admission. An online application is available at <http://www.housing.fsu.edu>.

As space is limited, interested students are urged to submit their applications as quickly as possible. Assignments are made on a priority basis: 1) returning students and 2) all new residents—by the date application and payment are received in the Office of University Housing. Although applicants are given the opportunity to express preference, no guarantee can be given that specific preferences can be met.

Agreements

The terms and conditions of occupancy for University apartments in Rogers Hall and Alumni Village require residents to file a thirty-day notice of intent to vacate. Rent is charged for thirty days from the date the notice is filed in the resident manager’s office. Residents who will not continue as full-time, degree-seeking students will be required to vacate the day following the last scheduled examination for the semester. The terms and conditions of occupancy for Sherrill W. Rogers Hall are for one semester only. Students who wish to extend their contract beyond their initial semester must contact University Housing one month prior to the end of their initial contract period.

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. Roommate requests are posted on a bulletin board outside the office located at 229–230 Activities Building, *Oglesby Union*.

The Florida State University wishes to address the needs of the total student whether those needs arise in the areas of social and cultural awareness, physical well-being, intellectual expansion, or spiritual and moral growth. The University seeks to provide students with these opportunities by offering various programs outside the classroom.

ORIENTATION AND INFORMATION SESSIONS

The Graduate School hosts a **New Graduate Student Orientation** at the beginning of 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, 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 Wednesday and Thursday 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.

New students receive the *New to FSU: A Guide to FSU and the Community* handbook when they check-in with the CGE staff. At orientation, students are provided information primarily to help them maintain their student visa status.

Note that this required 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 at the Global and Multicultural Engagement building on 110 S. Woodward Street, 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. For more information, visit <http://cge.fsu.edu/>, call (850) 644-1702, or e-mail CGE-NewStudents@admin.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 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 FSU Graduate School offers a wide range of workshops designed to equip students to achieve their educational and career goals. Descriptions of the academic year professional development workshops are located at <http://gradschool.fsu.edu>.

Preparing Future Faculty (PFF) Program

The Preparing Future Faculty (PFF) program assists doctoral students in getting ready for faculty work. Through participation in coursework, workshops, mentoring, and interviewing faculty from other institutions, PFF

Fellows 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 key-stones of: Teaching Preparation, Research Preparation, Career Development, Mentoring, and Portfolio Development. To earn the PFF Certificate, students 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). Fellows 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/post-docs/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://gradschool.fsu.edu> 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 *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 Wednesday and Thursday 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. The PIE Program also offers online and face-to-face workshops during the Fall and Spring semesters. For more details about the conference and other programs offered by PIE, contact the Graduate School at (850) 644-3500, or visit the PIE Web site at <http://pie.fsu.edu/>.

Office of Distance Learning

The **Office of Distance Learning (ODL)** provides a wealth of information on preparing to teach at FSU, including teaching strategies, best practices, and an exhaustive checklist of resources for those who are preparing to teach their first semester. Also note that this is the online home of *Instruction at FSU*, the official teaching handbook of Florida State University. Please visit <http://distance.fsu.edu> and select *Online Course Development and Faculty Support*.

Campus.fsu.edu. The Florida State University learning management system (Blackboard) provides a secure environment for teaching and learning. Visit <http://campus.fsu.edu> to log in to Blackboard, or to activate your FSUID should you not yet have access.

ACADEMIC INTEGRITY AND GRIEVANCES

A Summons to Responsible Freedom

Values and Moral Standards at Florida State University

The moral norm, which 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. Sexism, sexual harassment, and sexual coercion of any sort are

wrong and constitute a violation of fundamental moral requirements and state law. Minimally responsible behavior requires that no one take sexual advantage of another.

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 cultural, ethnic, and racial diversity of the University community provides an opportunity for learning about those different from oneself. The University expects each individual to make a special effort to ensure that all are treated with dignity and respect and accorded the full opportunities of the University. Racism, whether in assumptions, attitudes, acts, or policies, is incompatible with the concept of responsible freedom as espoused by Florida State University.

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.

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 The 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 submission 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; or using facts, figures, graphs, charts or information without acknowledgement of the source.
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; 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:

1. 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.
2. 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:

1. when possible, to discuss the allegations with the instructor.
2. privacy, confidentiality, and personal security.
3. to be assisted by an adviser who may accompany the student throughout the process but may not speak on the student's behalf.
4. to choose not to answer any question that might be incriminating.

5. 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, the student is not permitted to withdraw or drop the course unless the final outcome of the process dictates that no academic penalty will be imposed. 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 should contact the Dean of Students Department for further information regarding their rights.

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 Dean of the Faculties.

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 the Dean of the Faculties to discover whether the student has a prior record of academic dishonesty in order to determine whether to proceed with a Step 1 agreement. 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* (refer to <http://dof.fsu.edu/content/download/21142/136635>) 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://dof.fsu.edu/content/download/21142/136635>). 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://dof.fsu.edu/content/download/21142/136635>), which must then be sent to the Dean of Students Department. 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://dof.fsu.edu/content/download/21145/136644>) along with supporting documentation to the Office of the Dean of the Faculties. The Dean of the Faculties (or designee) will review the submitted documentation to determine whether the instructor has imposed a sanction that is disproportionate to the offense. The Dean of the Faculties may affirm or modify the sanction as appropriate. The decision that results from this review is final.
4. The student may deny responsibility. In this circumstance, the instructor submits the "*Academic Honor Policy Hearing Referral*" form (refer to <http://dof.fsu.edu/content/download/21149/136662>) along with supporting documentation to the Dean of the Faculties Office 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://dof.fsu.edu/content/download/21149/136662>) and appropriate documentation to the Office of the Dean of the Faculties.

Allegations of academic dishonesty involving a graduate student engaged in any phase of the preliminary 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 Dean of the Faculties 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 Dean of the Faculties 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 Dean of the Faculties (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 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 Dean of the Faculties (or designee) and the instructor. The criteria used by the instructor to determine the proposed academic penalty should include the seriousness and the frequency of the alleged violation. The following sanctions are available in the Step 1 procedure.

1. **Additional academic work**
2. **A reduced grade (including “0” or “F”) for the assignment**
3. **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 Dean of the Faculties (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 respon-

sible 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:

1. **Additional academic work**
2. **A reduced grade (including “0” or “F”) for the assignment**
3. **A reduced grade (including “F”) for the course**
4. **Reprimand (written or verbal)**
5. **Educational Activities** – attendance at educational programs, interviews with appropriate officials, planning and implementing educational programs, or other educational activities. Fees may be charged to cover the cost of educational activities.
6. **Restitution**
7. **Conduct Probation** – a period of time during which any further violation of the Academic Honor Policy may result in more serious sanctions being imposed. Some of the restrictions that may be placed on the student during the probationary period include, but are not limited to: participation in student activities or representation of the University on athletic teams or in other leadership positions.
8. **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. The restrictions that may be placed on the student during this time period are the same as those under Conduct Probation.
9. **Suspension** – Separation from the University for a specified period, not to exceed two years.
10. **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.
11. **Expulsion** – Separation from the University without the possibility of readmission.
12. **Withholding of diplomas, transcripts, or other records for a specified period of time.**
13. **Suspension of degree, in cases where an offense is discovered after the degree is posted.**
14. **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.

The procedures followed during the appeals process are:

1. The student should file a written letter of appeal to the Office of the Dean of the Faculties 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.

2. 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.
3. 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.
4. Appellate decisions are communicated in writing to the student, the instructor, the Office of the Dean of the Faculties, and the Dean of Students Department 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 Dean of the Faculties 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 Dean of the Faculties 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 Dean of the Faculties. 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, and then to the Panama City Dean, stopping at the level at which the complaint is resolved. If no resolution is reached in Panama City, 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 Dean of the Faculties 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 Dean of the Faculties. 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 the Dean of the Faculties. 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 Dean of the Faculties.

Step 1. Within 30 calendar days 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 30-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 program or department chair during this process.

Step 2. If no resolution is reached within this 30-day period, after the student's documented attempt, the student has an additional 15 calendar days to submit a written statement to the program or department chair. 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 20 calendar days thereafter, the department or program chair will arrange 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. 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 or program chair will select appropriate students who have no conflict of interest. Both the student and the instructor may attend the meeting.

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 program or department chair, 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 20 calendar days of a positive decision from the grade appeals screening committee, the program or department chair will appoint and arrange for a meeting of a grade appeals board. This board is composed of three faculty members and two students other than those who served on the screening committee.

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. Both the student and the instructor 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 program or department chair.

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 Dean of the Faculties regarding referral to the Student Academic Relations Committee.

Religious Holy Days

Per Section 1006.53, Florida Statutes, the Florida State University policy on observance of religious holy days provides that students shall, upon notifying their instructor, be excused from class to observe a religious 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 holy day observance. 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 Dean of the Faculties 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.

GRADUATE DEGREE 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 do graduate work in the chosen field.

A student is expected to have adequate command of the English language to enable the student to organize subject matter and to present it in creditable 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 Code shall include representing another's work or any part thereof, be it published or unpublished, as one's own" - Dean of Faculties 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 adviser 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.

Graduate Students Enrolled for Two Degrees Simultaneously

Under certain special circumstances it is possible for a student to work on two degrees in two different departments at the same time. 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.

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 advisers or their college when choosing to pursue a double major or dual degree. This policy applies to both current and readmitted students.

Distinction between Dual and Joint Degrees

Joint degree programs provide students the opportunity to earn graduate degrees from two academic programs concurrently. Students completing joint degrees receive two diplomas, one for each degree.

In addition to academic program requirements, joint degree programs provide for some cross-credit of a specified number of hours from each of the two degree programs. This enables students who are admitted and enrolled in two programs concurrently to, in effect, "save" on the number of total hours required versus those required when completing the two degrees separately. The development and initial approval of all joint degree programs resides with the program faculty in the specific schools and colleges involved.

Applicants must complete an application to the Office of Graduate Admissions and must be admitted to each academic program separately, meeting all of the admission requirements for that program, such as applicable entrance exams (e.g., GRE, GMAT, LSAT). Interested students contact respective degree programs for specific admissions requirements and programs of study.

Dual Degrees are two degrees earned simultaneously when a student is accepted by both a department/programs and is approved by appropriate 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.

Master's Degree Programs

Degrees Offered

The University confers at the master's level the 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), and Specialist (SPE) degrees.

The minimum requirements stated below govern all of these degrees except the EdS, 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 two types of programs by which a student may secure a master's degree: the thesis type and the course type. 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 Program. To qualify for a master's degree under this 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.

Course-Type Program. To qualify for a master's degree under this program, 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 (A, B, C).

Requirements at 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 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 courses not counted toward a previous degree from another regionally accredited graduate school is limited to six semester hours and transfer of 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-two 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 evaluation section of the Office of Admissions of 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.

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 of residency 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.

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 adviser 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 students at the option of the department. The supervisory committee consists of at least three members: the major professor and one or two additional members from the major department. Additional members may be appointed if deemed desirable. All members of the committee must hold at least Graduate Faculty status. 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 graduate. Only members of the supervisory committee may vote and sign the Manuscript Signature Form indicating approval of the thesis.

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.

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. Formatting and clearance guidelines for the

final electronic submission copy may be accessed at the Graduate School's Blackboard GradSpace and/or Faculty/Staff sites, or by contacting the manuscript clearance adviser.

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 final semester. 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.

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. 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 adviser. The final approved version of the thesis must be submitted electronically to the university manuscript clearance adviser in the Graduate School within sixty days of the defense date or the student must be re-examined. If the student wishes University Microfilms International, Inc. to register the copyright, an additional fee must be paid. Consult the Registration Guide for the 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.

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.

Special 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.

1. 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.
2. 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), 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 Human Sciences, College of Music, College of Nursing, College of Social Sciences and Public Policy, College of Social Work, College of Visual Arts, Theatre and Dance, 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 done in their specific fields but also with the potential and opportunity for further advances; 2) have demonstrated 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 studies.

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.

Residence

The intent of the residency requirement is to ensure that doctoral students contribute to and benefit from the complete spectrum of educational, professional, and enrichment opportunities provided on the campus of a comprehensive university. When establishing residency the student should interact with faculty and peers by regularly attending courses, conferences, or seminars, and utilize the library and laboratory facilities provided for graduate education.

After having finished thirty semester hours of graduate work or being awarded the master's degree, the student must be continuously enrolled on Florida State University Tallahassee campus for a minimum of twenty-four graduate semester hours of credit in any period of twelve consecutive months. In cooperative degree programs involving two or more universities, residence requirements may differ from the foregoing only with the approval of the graduate policy committee and the Dean of the Graduate School. Students in such programs should check residence requirements with their departmental chairs or program leaders.

The College of Education and the art education program in the College of Visual Arts, Theatre, and Dance permit EdD students, if they so desire, to complete their residency requirement by registering for thirty credits during a sixteen-month period.

Transfer Credit

Transfer of courses not counted toward a previous degree from another regionally accredited graduate school is limited to six semester hours and transfer of 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-two 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 evaluation section of the Office of Admissions of 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

Because 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, there is no University-wide minimum course requirement beyond that implied by the residence requirement. 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.

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 which 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 non tenure track faculty) co-doctoral or co-master's status. Under special circumstances persons external to the University may be appointed as Courtesy Faculty with co-doctoral or co-master's status and serve on a student's supervisory committee. 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 graduate. **Each year the supervisory committee, the major professor, or the student's adviser 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. Notification of the supervisory committee membership will be reported to the Dean of the Graduate School in a timely manner after its formation. Only members of the supervisory committee may vote and sign the dissertation.

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. 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. 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 adviser 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 adviser 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 Classical Languages, Literature, and Civilization 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 foreign language education program of the College of Education for coursework, and the completion of that coursework will 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.

When proficiency in statistical analysis is permitted or required, the criteria shall be established by the Department of Statistics. This proficiency can be met by satisfactory grades in STA 5126, by passing the statistics department's proficiency examination, or by other procedures approved by the chair of the Department of Statistics.

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 doctoral degree. No student may register for dissertation or doctoral treatise 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/treatise 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 reexamined; 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.

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, or the student's supervisory committee will require that a new preliminary examination be passed.

Admission to Candidacy

A student who has passed the preliminary examination and has been certified to 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.

Dissertation

A doctoral 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. Formatting and clearance guidelines for the final electronic submission copy may be accessed from the "Graduate School" Blackboard GradSpace and/or Faculty/Staff sites, or by contacting the manuscript clearance adviser.

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 made a final dissertation submission** shall include in the required full-time load a minimum of two credit hours of dissertation per semester until completion of the degree. Those with underload permission must register for at least two credit hours of dissertation per semester. 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.

In accordance with the Residence requirement the minimum number of dissertation hours for completion of a doctoral degree shall be twenty-four credit hours.

For more specific information on final-semester registration, see the section Registration for Final Term. Final approval of the dissertation by the entire supervisory committee is prerequisite to the awarding of the degree. This is true no matter how many hours a student has completed in dissertation or what grades have been recorded for the dissertation hours.

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 defend by no later than the Format Approval Deadline in the semester of intent to graduate. Consult the Graduate School Blackboard site GradSpace for more information.

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. 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 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. 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 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 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. 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 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 Adviser or to the appropriate college or departmental office for subsequent delivery to the Clearance Adviser in the Graduate School. 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 appropriate 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 Adviser.

The final version of the dissertation that is approved by the supervisory committee must be submitted electronically to the university manuscript clearance adviser in the Graduate School within sixty days of the defense date or the student must be re-examined. A manuscript processing fee is charged.

Publication of Dissertation

Publication of the dissertation through standard media for scholarly work is encouraged. To ensure at least minimum availability of the work, an acceptable and approved abstract of the dissertation and a copy of the dissertation submitted to the manuscript clearance adviser will be sent to University Microfilms International, Inc. The abstract will be published in Dissertation Abstracts International and the dissertation will be microfilmed. If the student wishes University Microfilms International, Inc., to register the copyright, an additional fee must be paid.

Guidelines for Restrictions on the Release of Theses and Dissertations

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) must be made available in their complete and original format. They cannot be subdivided into chapters and disseminated under different distribution options.

Worldwide Distribution. Recommended to all of our students. This option makes the ETD freely available worldwide via the FSU ETD Digital Library. 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 distribution (option above).

The maximum delay in the release of a thesis, treatise, or dissertation to the university libraries and UMI/PQIL shall not exceed twenty-four months from the date the thesis, treatise, or dissertation is approved by the FSU 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 presented in writing, through the use of the ETD Embargo Access Form, to the Dean of the Graduate School and carry the endorsement of the student, the major professor, the department or program chair, and the dean of the relevant college or school.

It should be recognized that adherence to this policy does not constitute a guarantee that information in the sequestered thesis or dissertation will not be disseminated by means other than the written thesis or dissertation.

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.

Campus Community-Only Access

The FSU Digital Library, in cooperation with the FSU Graduate School, will offer restricted access to ETDs at FSU. Students may choose to limit access to their ETD on FSU's campus only via Internet Protocol (IP) range restrictions, and can select whether their dissertation should be available via Interlibrary Loan.

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 in the form of a signature on the ETD Access Embargo Form.

Final approval may be granted by the Dean of the Graduate School only after the ETD Access Embargo Form is submitted to the Graduate School with appropriate signatures and justification. The ETD Access Embargo form can be found on the Graduate School Blackboard sites, GradSpace and/or Graduate School – Faculty/Staff, under the submenu "Theses, Treatises, Dissertations."

Document Security Access

The FSU Digital Library, in cooperation with the FSU Graduate School, will offer students the option of protecting the ETD by designating specific Document Properties via Permissions Password Security Method within Adobe.

The Document Security policy enables students to secure their manuscript to be placed on FSU's ETD database, with the following restrictions: no print-

ing, no changing the document, no document assembly, no content copying or extraction, no commenting, no filling of form fields, signing, or no creation of template pages. Students are not allowed to select which Document Security Access options they would like to utilize. If a student wishes to secure their manuscript, all Document Security Access options will be employed.

Students must select this option on their ETD Access Embargo Form. The ETD Access Embargo form can be found on the The Graduate School Blackboard sites, GradSpace and/or Graduate School – Faculty/Staff, under the submenu "Theses, Treatises, Dissertations." Document Security Access can be used in conjunction with World Wide Access, Embargo Access or Campus Community-Only Access.

Once the student's ETD is submitted, the manuscript clearance adviser will make the requested changes to the student's ETD. Students must NOT make these changes to their manuscript before submission to the ETD Drop Box.

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 Visual Arts, Theatre and Dance.

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. Requirements for the degree are listed in the "College of Music" chapter of this *Graduate Bulletin*.

Requirements of the Doctor of Nursing Practice (DNP) Degree

For more information, please refer to the "College of Nursing" chapter of this *Graduate Bulletin*.

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, Step2 CK, 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*.

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*.

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. 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 or thesis does not guarantee 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 award of the master's degree or 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 award of the doctoral degree. Faculty judgment of the academic performance of the student is inherent in the educational process in determining whether admission to doctoral candidacy and the award of the doctoral degree is warranted.

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 stat-

ing 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

Guidelines and Requirements for Electronic Theses, Treatises, and Dissertations may be accessed at the Graduate School Blackboard GradSpace and/or Graduate School – Faculty/Staff sites, or by contacting the manuscript clearance adviser.

During the first two weeks of the term in which a candidate expects to receive a degree, application should be made for a diploma at the Office of the University Registrar. If a candidate previously filed for a diploma but did not receive the degree, the application procedure must be repeated.

For a complete list of requirements necessary in order for thesis, treatise and dissertation-writing student's manuscripts to be cleared for graduation, students should download a manuscript specific checklist from the Graduate School GradSpace Web site. Faculty and staff are able to view and download these checklists off the Graduate School Web site, Graduate School – Faculty/Staff. These checklists outline all steps necessary for the student's manuscript to be cleared by the manuscript clearance adviser. No candidate is eligible for the degree until this requirement has been met. Additional requirements may be imposed by individual programs or departments.

For additional information, students may access the Graduate School Blackboard site, GradSpace, under the submenu, "Manuscript Clearance." Faculty and staff may access the Graduate School Blackboard site, Graduate School – Faculty/Staff, under the submenu, "Manuscript Clearance." Any additional questions should be directed to the clearance adviser (clearance@mailier.fsu.edu). Consult the *Registration Guide* for the current deadline dates.

Policy for Awarding Degrees

The Florida State University helps students meet their academic goals by monitoring academic progress toward their degree.

If a graduate student has completed his or her 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 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 for continued 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.

ACADEMIC REGULATIONS AND PROCEDURES

Required First Day Attendance Policy

University-wide policy requires all students to attend the first day of 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.

Class Attendance

Attendance at the first class meeting is mandatory unless properly excused by the class instructor. 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.**

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. A student reported for excessive absence in any course may be required by the academic dean to drop the course with the grade of "F".

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 their academic dean.

The Director of Student Health Services does not issue excuses to students. A card indicating date and time of admission, discharge or treatment will be given to the student for presentation to the faculty member in a timely manner. 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. This policy includes required attendance and completion of all final examinations or evaluations for each class in which the athlete is registered. Student-athletes must remain in good academic standing in order to maintain eligibility during post-season games, the upcoming semester, and future competitive seasons. 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.

Classification of Students

Students are classified on the basis of semester hours earned as follows:

- **Graduate**, any student admitted to a graduate program, classification 5;
- **Non-Degree Seeking without Baccalaureate Degree**, classification 6;
- **Non-Degree Seeking with Baccalaureate Degree**, classification 7;
- **Provisional**, classification 8 (graduate students only);
- **Transient**, classification 9; and
- **High School Students**, classification 0.

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 system for regular students, non-degree seeking students in classification seven must meet the following requirements: after attempting twelve semester hours, graduate non-degree seeking 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.

Registration of Non-Degree Seeking Students

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 Status

Non-degree seeking students wishing to change to regular-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 reclassification 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.

Full-Time 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 is twelve credit hours per semester, unless the student is receiving a university assistantship for fellowship. 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 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.

For graduate assistantship holders on 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.

To satisfy the Residence requirement, all doctoral students must be enrolled for twenty-four credit hours during any single period of twelve consecutive months.

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.

Graduate-level courses may be modified downward in credit for a student by the student's academic dean.

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.

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 authorization, in advance, from an international student adviser. 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

Registrar: Kimberly A. Barber; **Associate Registrars:** Ann DelRossi, Andrew Konapelsky, Dianne Skinner

Location: A3900 University Center; phone: (850) 644-1050; e-mail: registrar@admin.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, 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, divisions and majors, 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 <http://www.disabilitycenter.fsu.edu>.

Registrar Cancellation of Schedule

Students allowed to register in error are canceled 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 the first day of class are canceled by the Office of the University Registrar. This cancellation is without liability for tuition. A student whose registration is canceled by the University Registrar must apply for readmission.

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

In accordance with Florida State University Regulation 6C2R-2.0248, students who do not pay tuition and fees or make arrangements for tuition and fee payment by the published deadline each semester will have their schedules canceled. 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 Financial 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.

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

Students whose schedules are canceled 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 no later than the end of the seventh week of the Fall and Spring semesters (consult the *Registration Guide* for Summer term deadlines). Prior to a student's appeal being approved, the Office of Student Financial 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.

Student Cancellation of Schedule

A student may cancel registration during the first four days of classes for a semester or Summer session by submitting a written request to the Office of the University Registrar A3900 University Center or to Withdrawal Services, A4300 University Center. 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. 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 adviser. In addition, international students should submit the SEVIS Update Form, available at <http://www.cge.fsu.edu/forms/sevis/SEVISTransferForm.pdf>.

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. 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.

A cumulative maximum of one course may be dropped **between the eighth and twelfth week** of classes until graduation; tuition charges will remain. See the "Academic Calendar" in the *Registration Guide* for semester-specific deadlines.

Except in cases where a student is petitioning to use one of the three drops allowed under the policy above, any course drop petition after the seventh week of classes (with dates prorated for individual Summer sessions), will be considered only in documented exceptional circumstances that are beyond the student's control, as determined by the student's academic dean. Academic deans exercise their administrative and academic judgment in making final determinations about drop eligibility. Course drops are never approved when there are unresolved allegations of academic dishonesty in a course or when a course grade reflects an Academic Honor Policy penalty.

Course drops approved under this policy are dropped with grade liability and appear on the student's transcript with the notation "WD." Students who register for courses but who do not attend the classes receive grades of "F" if the courses are not officially dropped.

Students Called to Active Military Duty

Students called to active duty who wish to receive incompletes for the semester and complete the coursework at a later date should fax or present to their individual instructors a copy of the orders calling them to active duty along with a written request to receive an incomplete ("I") in the course. Students called to active duty who prefer to have their schedules administratively cancelled should fax ([850] 644-1597) or hand-carry a copy of their orders along with a statement requesting an administrative cancellation to the Office of the University Registrar, A3900 University Center.

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, 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," admission to the University is not required. The course(s) taken will not appear on the student's permanent record.

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.

Transcripts

The Office of the University Registrar issues official transcripts at the written request of the student. Individuals needing official transcripts should make a written request directly to the transcript section of the Office of the University Registrar or online at <http://campus.fsu.edu>.

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 Judicial Office 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 \$5.00 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://campus.fsu.edu>, click the **Secure Apps** tab and select **My Unofficial Transcript**.

Proof of Enrollment

All student certifications will be by official request only. Students in need of enrollment verification should submit an electronic request through the **Secure Apps** section of <http://campus.fsu.edu>. Select **Certification Request**. Follow the instructions to obtain your certification 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
PO 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 <http://www.degreeverify.org>.

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 <https://campus.fsu.edu> and selecting the Parent/Third Party Access 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 is held 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 adviser prior to registering for classes.

Registration at Florida State University is conducted by Web site. To register online, go to <http://registrar.fsu.edu> and choose "Register Online" from "Registration Tools". Using the Web site, students can register for all of their courses in a matter of minutes and can gain access to information concerning their tuition and fees from the privacy of their own home. **Please note that by registering, students accept both fee and grade liability.** Students are advised if the requested course is available and informed of other matters related to registration, such as variable credit. However, the registration system will not tell students if they have registered for classes meeting during the same time period. Therefore, it is important to plan very carefully before requesting courses.

Registration Guide and Course Schedules

Florida State University publishes the *Registration Guide*. The *Guide* contains a list of all registration deadlines, fee and payment information, and important announcements. 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 **Course Look Up system**. This system is available twenty-two hours a day, year round. To view class schedules, select the Course Look Up link from the Web page of the Office of the University Registrar. Course listings for an upcoming semester will be available fourteen days prior to the first registration window for that semester.

Students are advised to organize their material and plan their schedule before attempting to register online. 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 corequisites for each course in which they are enrolled. Students are also responsible for any changes made to their schedule without an adviser's approval through the drop/add process.

Students will 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.

Registration Permits

All permits, such as directed individual study (DIS), satisfactory/unsatisfactory (S/U) grading, and requests to take a graduate course by undergraduate students, ideally should be completed at the time of academic advisement. All permits must be completed by the end of the seventh week of classes of the Fall or Spring semester, or by the prorated term deadlines published in the Summer *Academic Calendar*. Many permits require the signature of the academic dean as well as the adviser. Students are responsible for ensuring that the Office of the University Registrar has copies of these permits on file.

Course/Credit Modification

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. Also, failure to meet specific requirements of a University college, school, or department, the judicial office, or in the cases of non-degree students, the Office of the University Registrar may induce a registration stop.

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 record 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 adviser 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; and
6. Faculty and full-time students at either institution have equal access to the library facilities at both institutions.
7. 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.
8. 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.

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. 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.)

An official course-by-course evaluation is required for all academic records from non-U.S. institutions. Students should refer to the 'International Student Admission' section in the "Admissions" chapter of this *Graduate Bulletin*.

Note: Academic rules governing regular students (e.g., fees, drop/add, withdrawal, grading policies) also apply to transient students.

Faculty Members Seeking Advanced Degree

No faculty member above the rank of instructor (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 her/his field and wants to pursue either another PhD in a different field or a less advanced degree than the one he/she holds (e.g., a faculty member holding a PhD may pursue a Master's Degree).

Undergraduate Course Examinations

Final examinations in undergraduate courses are discretionary within any given department, but all students, including graduating seniors and graduate

students, who are enrolled in an undergraduate course having a final examination are required to take the examination. The scheduling of a final examination, at any time other than the regularly scheduled final examination period is prohibited by University policy. A final examination may not be given during the examination period at a time other than that which appears online at <http://registrar.fsu.edu>. Unless an exam is given during the final examination period, no test may be given during the last week of classes.

Courses meeting every day at the same hour and classes meeting for more than one time period will hold examinations according to the time and day of the first scheduled class meeting of the week. For example, a class meeting for the first period on Tuesday and for the second period on Thursday will hold its examination at the exam time scheduled for the Tuesday first period.

Under special circumstances, exceptions to final examination policies for individual students will be given consideration by the academic dean of the college in which the course is taught.

Exceptions to the Examination Policy for an Individual Undergraduate Student. Courses that utilize the University Assessment Center for a block exam, or which are otherwise limited to specific days and times because of seating and scheduling constraints, will take precedence of final exam schedule conflicts. It is the student's responsibility to identify such conflicts as early as possible and to notify all instructors in advance so that accommodations may be made. Approval by the academic dean of the school or college in which the course is taught is required for any change in examination time for an individual student. The student must first receive written permission from the instructor if the instructor is willing to give a make-up examination at a specified time within the exam week. The student must then petition the dean, giving the reason for the requested exception, and supported by the instructor's written permission. The dean will then notify the instructor in writing if approval is granted.

Make-up examinations are permitted for a student when justified by illness, conflicting examinations, four or more examinations in a 24-hour period, or for certain emergencies. Arrangements should be made prior to the scheduled exam.

In case of conflicting examinations, group examinations take precedence over examinations scheduled by class meeting time. In the case of conflicts that cannot otherwise be resolved, the course meeting earlier by day and time takes precedence over a course meeting later.

Note: The possibility of a conflict between final exam times exists, particularly for courses that meet in the evening or only once each week. It is the student's responsibility to identify if a conflict exists and immediately make special arrangements with the instructor to take the exam at an alternate time. Conflicts not recognized one month in advance of the scheduled exam must be resolved by using the established make-up time.

Exceptions to the Examination Policy for an Undergraduate Class. Courses that utilize the University Assessment Center for a block exam, or which are otherwise limited to specific days and times because of seating and scheduling constraints, will take precedence in the case of final exam schedule conflicts. It is the student's responsibility to identify such conflicts as early as possible and to notify all instructors in advance so that accommodations may be made. No instructor of an undergraduate course may give a final examination during the separate examination period at a time other than that which appears online at <http://registrar.fsu.edu>, unless the instructor has obtained prior approval from the Undergraduate Policy Committee. Such approval must be requested, in writing, at least three weeks prior to the scheduled final examination. To reschedule a final examination without such approval places the instructor in jeopardy of administrative reprimand by his or her dean and the Vice President for Academic Affairs.

Grading System

Definition	Grade	Quality Points Per Credit Hour
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

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

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 graduate student whose cumulative grade point average for courses taken at Florida State University falls below a 3.0 at the end of a term (not counting courses for which "S" or "U" grades may be given) will be placed on academic probation.

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 The Florida State University;
2. A student has earned a master's/specialist/doctoral degree from The Florida State University and is seeking a second master's/specialist/doctorate; or
3. A student has earned a master's/specialist degree from The Florida State University and is seeking a doctorate in a different major.

On the other hand, the Florida State University GPA will **not** begin as a new calculation for graduate students in the following admission/readmission circumstances:

1. 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
2. A student has earned a master's/specialist degree from Florida State University and is seeking a doctorate in the same major.

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*. 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.

Grading Practices

At the end of each term, a report of each student's grades is made available through Florida State University's *campus.fsu.edu* site.

Grades earned at another institution cannot be used to improve a grade point average or eliminate a quality point deficiency at Florida State University.

A student who is passing a course but has not completed all of the required work in the course at the end of the term may, in exceptional cases and with the permission of the instructor, be assigned a grade of "I" and a default grade based on the actual work completed in the class to date. This may include excused absences from final examinations. Grades of "I" are not assigned to any courses if a student withdraws from the University. Unless the instructor notifies the Office of the University Registrar of an extension in time, an "I" or an "NG" not removed by the end of the next term in which the student is enrolled will be recorded as "IE" or "GE;" both "IE" and "GE" are computed as an "F" in the student's overall GPA. An "I" will be changed to a final grade at the time the student completes the required work. Students may not re-register for courses in which an incomplete grade ("I") or no grade ("NG") is pending. If they do so, the original "I" or "NG" will automatically be changed to "F." This "F" grade is not repeatable and is so indicated on the student's permanent record. A grade of "I" or "NG" in a course that is approved for "S" or "U" grades only that is not removed by the end of the next term in which the student is enrolled will automatically become "U," unless the instructor notifies the Office of the University Registrar that there is to be an extension of time. Effective Fall 2010, any "I" grades awarded are also accompanied by the default grade. If the student fails to complete the coursework by the determined semester, the default grade will replace the "I" and become the final grade. Students may not complete the work at a later date and expect to replace the final grade.

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. A change in a grade may be made only by permission of the department head and the dean of the college.

Forgiveness Policy

Effective Fall 2004, Florida State University has discontinued the forgiveness policy for all students. Please refer to the 'Drop /Add or Changes of Schedule' section in this chapter for additional information.

Dismissal and Reinstatement

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 courses 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 not be permitted to register for graduate study, including registering as a non-degree seeking student. However, at the time of dismissal, the major professor 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. 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.

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. 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. 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. Students who are not enrolled at the University for two or more consecutive semesters must apply for readmission before resuming their studies.

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 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 in the University Center.

The statement "Withdrew from the University" will appear on the transcripts of students who properly withdraw within the first seven weeks of class. After that date, depending on the quality of work at the time of withdrawal, grades of "W" or "F" will be assigned by instructors and placed on the student's transcript with the withdrawal statement. 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 (25%) 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.

A student wishing to reenter the University for the following two semesters after withdrawal must have the approval 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; non-degree seeking students must complete the original application process. 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 adviser. In addition, international students should submit the SEVIS Update Form, available at <http://cge.fsu.edu/forms/sevis/SEVISTransferForm.pdf>.

For further information on refunds, see the 'Refunds of Fees' section in the "Financial Information" chapter of this *Graduate Bulletin*.

Readmission after Multiple Withdrawals

When a student has withdrawn from the University three or more times, subsequent readmission will first be considered by a 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.

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. At the time this *Bulletin* went to press, these policies were under review and may be subject to change. For information regarding medical course drops and medical withdrawals, visit <http://withdrawal.fsu.edu/health.html> or call the Withdrawal office 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.

FACTS Information

All current and prospective students of higher education in the state of Florida may access the FACTS (Florida Academic Counseling and Tracking for Students) Web site. By logging on to <http://www.facts.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, as well as all state community colleges
- 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 student is automatically assigned a FACTS PIN code to log on to the FACTS.org Web Site. This PIN is also used when students wish to be transient students and take courses at another college/university for a semester. For more information regarding the FACTS PIN, refer to the *Registration Guide*.

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 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 intercession period. The graduate-level directed individual study (DIS) is for S/U or letter-grade credit at the discretion of the department.

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 adviser 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 distribution. The primary institution will be responsible for monitoring awards and delivery of 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 three times per week. 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 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...

The myFSU service, which is funded in part by the University's Student Technology Fee, replaced the University's former e-mail system (@fsu.edu) for all students and alumni at the end of Fall 2011. Students and alumni should go to <http://fsu.edu/myfsu> to confirm their settings.

Questions regarding the activation of myFSU accounts can be answered by calling 644-HELP (4357) or visiting <http://www.helpdesk.fsu.edu>.

Student Addresses

Students are required to maintain their current local and permanent addresses with the university. Address updates may be done online at <https://campus.fsu.edu> or in person at the Office of the University Registrar, 3900 University Center A.

COLLEGE OF APPLIED STUDIES

Dean: Ken Shaw; **Associate Dean:** Steve Leach

Established in 2010, the College of Applied Studies is the newest college at the University. The administrative offices of the College of Applied Studies are located on the Panama City campus, which is about 100 miles southwest of Tallahassee, on beautiful North Bay.

Advising

Florida State University Panama City provides academic advising to students interested in pursuing coursework in the College of Applied Studies. For more information, please contact Angie Sexton by e-mail at asexton@pc.fsu.edu or at (850) 770-2178.

Certificate Programs

In addition to the degree programs, the College of Applied Studies offers certificate programs that provide additional specialized areas of emphasis. The certificate programs offered include: Graduate Certification in Event Management, Undergraduate Certificate in Underwater Crime Scene Investigation, and Graduate Certificate in Underwater Crime Scene Investigation. Additional information regarding the certificate programs may be found at <http://appliedstudies.pc.fsu.edu/>.

Programs

The College of Applied Studies currently offers the following programs:

- BS in Recreation, Tourism, and Events
- Undergraduate degree program in Public Safety and Security
- Online Graduate Certificate in Event Management
- Undergraduate and Graduate Certificate in Underwater Crime Scene Investigation

Plans are underway for several other 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://appliedstudies.pc.fsu.edu>.

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 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 Academic Center will accommodate significant growth in enrollment, approximately doubling the academic capacity of the campus. The three-story facility in excess of 100,000 square feet provides twenty-one general purpose classrooms, student seminar rooms, study and meeting rooms, a library and learning center, a 500-seat multi-purpose lecture hall/community room, and ten academic laboratories in support of programs in criminology, civil and environmental engineering, computer science, electrical engineering, advanced scientific diving and underwater crime scene investigation. Groundbreaking for the Florida State Panama City Academic Center was held in January 2007. The Academic Center was formally dedicated the Alfred P. and Mamie V. Holley Academic Center on January 21, 2009. The Holley Academic Center was named in recognition of Russell C. Holley's naming gift in honor and memory of his parents.

Student Honor Society

Garnet Key Honor Society of the Panama City campus, founded in 1986, recognizes students primarily for service and scholarship, but also for spirit and leadership. Activities are generally service projects and functions for the Panama City campus. Applicants must have completed fifteen semester hours at that campus with a GPA of 3.5 or higher. For more information, contact Cristina Rios by e-mail at crios@pc.fsu.edu.

COLLEGE OF ARTS AND SCIENCES

Interim Dean: Sam Huckaba; **Associate Deans:** Robert Contreras, Lois Hawkes, John Kelsay

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 The 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 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 inter-national honors.

Graduate students within Arts and Sciences have received marks of distinction that include local, national, and international scholarship/fellowship awards.

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

Teaching assistantships are available across the college. Annually, many students are supported by graduate assistantships. 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 January 15th 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), and the doctor of philosophy (PhD). In addition to reviewing the requirements highlighted below, students should consult all University-wide degree requirements and academic procedures for the master's and PhD 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 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 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 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; master's students do not, however, have to meet a specific residency requirement. 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 requires a minimum of thirty-two semester hours. Students in the thesis program must register for thesis credits each term in which a substantial amount of work is being done on the thesis, even if the minimum of six semester hours of thesis has already been met. 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 filled with the Registrar during the same semester. Retroactive changes are only permitted if the preliminary exam is passed by the mid-point 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 candidacy must register for dissertation hours each term in which a substantial amount of 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 register for at least two semester hours of dissertation each term in which they receive faculty supervision.

The PhD residency requirement is satisfied as follows: after completing thirty graduate semester hours or being awarded the master's degree, the doctoral student must be continuously enrolled for twenty-four graduate semester hours during any twelve-month period.

Effective with all committees appointed after August 24, 2009, the PhD supervisory committee must meet the new minimum university standard of four members with GFS (new Graduate Faculty Status definition). Included among these four members will be the University Representative who must hold not only GFS, but also be tenured faculty members. 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, the department chair, and the Dean for Student Academic Affairs in 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 Dean for Student Academic Affairs in Arts and Sciences a report on the quality of 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 the final term.

Clearance for Degrees

During the first three weeks of 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

Dean: Caryn L. Beck-Dudley; **Associate Deans:** David Paradice, Michael Hartline

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 offers curricula leading to the degrees of Master of Business Administration (MBA), Master of Accounting (MAcc), Master of Science in Finance (MS), Master of Science in Marketing (MS), Master of Science (MS) in Management with a major in Risk Management/Insurance, Master of Science (MS) in Management Information Systems, and Doctor of Philosophy (PhD) in Business Administration. The College of Law and the College of Business offer a joint-degree program 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-degree program leading to the Master of Social Work (MSW) and the Master of Business Administration (MBA) degrees.

The Master of Business Administration 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 summer (early May) semester. The MBA program incorporates nine core courses aimed at strengthening managerial skills and four flex courses to tailor the MBA curriculum to suit specific careers. Other opportunities are available to students with undergraduate degrees in accounting and management information systems.

The Master of Accounting program is designed to allow the student to major in either assurance services, accounting information systems, corporate accounting, 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 Master of Science in Management program with a major in Risk Management/Insurance 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 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 Finance (MS) program is a one year, lock-step, full-time, on-campus program that emphasizes the applied aspects of finance.

The Master of Science in Marketing (MS) program is a full-time, on-campus program that can be completed in two paths: 1) a standalone MSM program or 2) a combined BS/MS program for top undergraduate students. The overall theme of both programs is Corporate Reputation Management.

The objective of the doctoral program in business is to prepare students for careers in university teaching and research, 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, organizational behavior and human resources, strategic management, marketing, or risk management and insurance.

More specific information on all our graduate programs is available on the College of Business Web site at <http://www.cob.fsu.edu/grad>.

Institutes and Centers

The **Jim Moran Institute for Global Entrepreneurship (JMI)** in the College of Business at The 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 The Florida State University provides a forum for human resource professionals to enter into high level discussions with academics and colleagues on critical issues. The HRCenter also provides a vehicle for professional networking and provides a connection to, and support for, The Florida State University, a major research oriented university. In addition to the main focus, the HRCenter 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 & 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 resumé 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.

Facilities

The Charles A. Rovetta Business Building contains approximately 76,000 net square feet of modern classrooms, faculty and staff offices, and support facilities. The building is ideally located near both the Stroz Library and the Oglesby Union and contains a student reading room and lounge, seminar rooms, and offices for graduate assistants. All classrooms are equipped with the latest audio-visual and wireless networking equipment.

The College of Business has a state-of-the-art technology center. As computer applications have been integrated into all areas of the business curriculum, the computer laboratories and multimedia teaching classrooms have become an integral part of the learning process. The laboratories continue to be upgraded and currently contain modern hardware and up-to-date software. The microcomputers are integrated into a local area network (LAN) which provides student access to software in the laboratory and at other locations. The LAN also provides student access to mainframe computing systems in the University.

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) is required for admission to all graduate programs in the College of Business. For students whose native language is not English, the Test of English as a Foreign Language (TOEFL) 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 iBTTOEFL (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; TOEFL 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.

Master of Business Administration (MBA) Program: Thirty-nine semester hours are required for the full-time, part-time, and online programs. 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 Summer term (early May) and the application deadline is February 1st. 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. All materials, including a GMAT score, must be received in our office by the application deadline.

Master of Science (MS) in Management Program with a major in Risk Management/Insurance is an online, corporate program designed for the insurance professional and requires completion of thirty-three semester hours of graduate level coursework. The MSM in RMI 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. Deadline for receipt of all application materials is March 1. The program begins only in the Summer term.

Master of Science (MS) in Management Information Systems 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 three years of IT-related work experience, as well as the following prerequisite knowledge or skills; working knowledge of at least two programming languages such as C, C++, Java, Visual Basic, etc.; proficiency in at least one programming language at a level comparable to an entry-level professional programmer in that language; and knowledge of basic statistical concepts (descriptive statistics, regression and hypothesis testing). Students can enter the MS in MIS program in either the Fall (late August) or Spring (early January) terms. Deadlines for receipt of all application materials are: June 1st for the Fall term and October 1st for the Spring term.

Master of Accounting (MAcc) Program: This is a thirty-three semester hour program that allows admission any term. Deadlines for receipt of all application materials are: Fall term (deadline June 1st), Spring term (deadline October 1st), or Summer term (deadline March 1st). 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.

Master of Science in Finance (MS) Program: All students start in 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. Deadline for receipt of all application materials is March 1st.

Master of Science in Marketing (MS) Program: This is a thirty-three semester hour program that allows admission any term. Deadlines for receipt of all application materials are: Fall term (deadline June 1st), Spring term (deadline October 1st), or Summer term (deadline March 1st). The MSM program is designed as a full-time, lock-step program which can be completed in one year. Applicants who do not have an undergraduate Marketing degree will be required to take prerequisites.

Doctor of Philosophy (PhD) in Business Administration Program: Admission is only for the Fall term in order to be eligible for financial aid and to provide an optimum program schedule. The application deadline for domestic students is March 1st; for international students is February 1st. In order to be eligible for the widest range of financial assistance packages, it is recommended that applicants submit all materials by no later than **January 1st**.

Individuals interested in the graduate programs offered by the College of Business should contact: *The Graduate Office, College of Business, P.O. Box 3061110, The Florida State University, Tallahassee, FL, 32306-1110 (grad-prog@cob.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) Curriculum

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 The 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, accounting, statistics, calculus, and management principles through prior work experience and/or coursework. In addition, applicants should have at least two years full-time work experience in a professional or supervisory position.

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 program includes nine standard courses taught by a variety of departments within the College of Business. All MBA students are required to complete the following courses:

ACG 5026	Financial Reporting and Managerial Control
BUL 5810	The Legal Environment of Business
FIN 5425	Problems in Financial Management
ISM 5021	Information and Technology Management
MAN 5245	Organizational Behavior
MAN 5501	Operations Management
MAN 5716	Economics/Business Conditions
MAN 5721	Strategy and Business Policy
MAR 5125	Marketing Strategy in the Global Environment

The remaining four are flex courses; the College of Business offers the following options for flex courses:

RMI 5017	Fundamentals of Risk and Insurance
FIN 5515	Investment Management and Analysis
MAR 5409	Business-to-Business Sales and Marketing
MAR 5465	Purchasing and Supply Chain Management

Flex courses also may be chosen from other areas in the College of Business with approval of the academic dean for graduate programs. With the approval of the academic dean for graduate programs, other opportunities are available to students with undergraduate degrees in accounting and management information systems.

Master of Science (MS) in Management

Master of Science in Management Program with a major in risk management/insurance 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 (MS) in Management Information Systems

The management information systems major requires completion of thirty-three semester hours. Applicants must have successfully completed a course in statistics, calculus, and two programming languages such as visual basic and C++ to qualify for admission. Work experience is also a requirement. The MS in MIS program is primarily designed for students who want to manage in technology oriented environments. 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-three semester hours (plus undergraduate foundation work if required). Students select a concentration in either accounting information systems, assurance services, corporate accounting, 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 application and admission. The general graduate admissions policies of the College of Business also apply.

Master of Science (MS) 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.

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).

Further information may be obtained from: *The Graduate Office, College of Business, The Florida State University, Tallahassee, FL 32306-1110 (gradprog@cob.fsu.edu).*

Master of Science (MS) in Marketing

The Master of Science in Marketing program offers students two paths to completion: a one-year, stand-alone MS program and a five-year, combined BS/MS program for top undergraduate students in the marketing or professional sales majors. The overall theme of the MS program is Corporate Reputation Management, with key courses consisting of marketing research and analytics; corporate communication; ethics and social responsibility; and corporate affairs management. The goal of the program is to provide students with a 360-degree view of the firm and exposure to the marketing activities that firms use to manage their reputations among a variety of key stakeholders (i.e., customers, employees, government, media, society). The MS program requires completion of thirty-three semester hours of graduate-level coursework (undergraduate students in the combined BS/MS program may count twelve hours of approved graduate credit toward both the bachelor's and master's degrees).

Post-baccalaureate students entering the MS program will be expected to meet the following admission requirements:

- Minimum 3.0 overall GPA
- Minimum score of 530 on the GMAT
- Minimum TOEFL score of 600 on the paper-based test and 100 on the internet-based test, or a minimum of 7.0 on the IELTS exam, taken within the past two years, if applicable.

Academically talented undergraduate students pursuing the combined BS/MS in Marketing program will experience a five-year, accelerated program that allows up to twelve credits of coursework to be dually counted toward both the BS and MS degrees. Once the student has completed the requirements for the undergraduate degree, they will be awarded the Bachelor of Science in Marketing (with a major in either Marketing or Professional Sales). When the requirements for the MS degree are met, the student will receive the Master of Science in Marketing. Undergraduate students entering the combined BS/MS program will be expected to meet the following admission requirements:

- Completion of at least 60 credit hours at Florida State University with a minimum 3.0 overall GPA
- Minimum 3.2 GPA across all business courses
- Certified eligibility from the Office of the University Registrar

Transfer students must have completed at least 24 credits at FSU with the same minimum GPA requirements

Undergraduate marketing or professional sales students may apply to the Department of Marketing as early as the second semester of their sophomore year. If accepted, these students should take the GMAT at the end of their junior year and apply to the graduate school during the first semester of their senior year.

Further information on the MS in Marketing program may be obtained from: *The Graduate Office, College of Business, The Florida State University, Tallahassee, FL 32306-1110 (gradprog@cob.fsu.edu)*. Undergraduate students who are interested in the combined BS/MS program should first contact the Department of Marketing.

Juris Doctor (JD)/Master of Business Administration (MBA) Curriculum

The College of Law and the College of Business offer a joint-degree program 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 program 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, The Florida State University, Tallahassee, FL 32306-1110 (gradprog@cob.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; (850) 644-3787*.

Master of Social Work (MSW)/Master of Business Administration (MBA) Curriculum

The College of Social Work and the College of Business offer a joint-degree program 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 degree 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, The Florida State University, Tallahassee, FL 32306-1110 (gradprog@cob.fsu.edu)*. Students interested in the MSW/MBA degree should also contact the *Director of Admissions, College of Social Work, Florida State University, Tallahassee, FL 32306-2570, (850) 644-4751*.

Doctor of Philosophy (PhD) in Business Administration Program

The purpose of the doctoral program is to prepare candidates for careers in university teaching and research, 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, strategic management, 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

Dean: Lawrence C. Dennis; **Associate Deans:** Gary R. Heald, Corinne Jörgensen; **Assistant Deans:** Ebrahim Randeree, Barbara C. Robinson

Communication, information and information technology are ubiquitous in our connected society and influence all forms of human activity. Understanding the complex and ever-changing world of people, communication, information, and technology and assuring that all people have access to communication and information are efforts underlying the teaching, research, and service missions of the College of Communication and Information 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 in library and information studies** 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, and preserved. 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 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 personal, 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/>.

The School of Communication

The School of Communication prepares students for careers in communication professions, in research and academic professions, and for active participation and leadership in organizations and community life. The school faculty conducts research on communication policies, industries, and processes and disseminates the results of this work in a variety of publications.

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://www.comm.cci.fsu.edu/> and/or consult the "School of Communication" listing in this *Graduate Bulletin*.

The School of Communication Science and Disorders

The mission of the School of Communication Science and Disorders is to prepare students to demonstrate broad-based knowledge in communication processes and disorders and to integrate theoretical knowledge and research findings with clinical practicum experiences. The 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 mission is realized through clinical and traditional instructional programs, professional and clinical service, as well as clinical research.

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://www.commdisorders.cci.fsu.edu/> and/or consult the "School of Communication Science and Disorders" listing in this *Graduate Bulletin*.

The School of Library and Information Studies

The School of Library and Information Studies offers a myriad of opportunities to blend concerns for people's need for information with complex and highly sophisticated technology. A critical function of the information profession is to serve as a bridge between people, information, and technology, ensuring that information systems are designed to foster and empower users, and that the information technology used is reliable, robust, affordable, and flex-

ible. Information professionals ensure that people can access the information they want and need within the context and concerns of security and privacy, intellectual property, and information policy.

Established in 1947 as a professional school, the School of Library and Information Studies offers undergraduate education in Information Technology and graduate education in Information Studies. The degree program leading to the Master's in Library and Information Studies is accredited by the American Library Association, and the College is a member of the Association for Library and Information Science Education (ALISE). The school was authorized to offer the Doctor of Philosophy (PhD) degree in 1968 and the Specialist degree in January 1997. For more information, please visit <http://slis.cci.fsu.edu/> and/or consult the "School of Library and Information Studies" listing in this *Graduate Bulletin*.

Bachelor's to Master's Degree Program

The College of Communication and Information has developed a combined bachelor's to master's degree program (BS to MS) combining a bachelor's degree in Information Technology or Communication and a master's degree in either Integrated Marketing Communication or Media and Communication Studies programs in Communication. This program 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 BS and MS degrees. Check the Web site for more details: <http://www.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:**

- Goldstein Library
- Seminole Productions
- L. L. Schendel Speech and Hearing Clinic
- Center for Adult Language Laboratory
- Center for Augmentative and Alternative Communication Laboratory
- Communication and Early Childhood Research and Practice Center
- Center for Hispanic Marketing Communication
- Center for Information Analysis and Organization
- Information Use, Management and Policy Institute (Information Institute)
- Institute for Intercultural Communication
- Neurolinguistic-Neurocognitive Research Center
- North Florida Center for Stuttering
- Partnership for Advancing School Library Media (PALM Center)
- Project Management Center
- Research and Language and Literacy Lab
- 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 and media production **labs and technical support services**, including the following:

- IT Help Desk and Computer Lab in the Goldstein Library to provide access to technology support, advanced software systems, and high-end computer systems
 - iSpace virtual computer system for developing Web pages and remote applications access
 - New Technology center in the William Johnston Building for instruction in networking, databases, media production, health information technology, mobile and enterprise information systems
 - Computer classrooms in University Center for advanced media production and statistical analysis
 - 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
 - Communication Graduate Student Association

National Student Speech Language Hearing Association
Public Relations Society of America
Women in Communication
Women in Computing

Scholarships, Awards, and Financial Aid

The schools of the college offer research and teaching assistantships to both master's and doctoral students. Such assistantships vary in amount and are competitive. Assistantships typically provide assistance with matriculation fees.

Graduate Assistantships

The college administers graduate research, service, and teaching assistantships that require work in the school assisting faculty in teaching and research, staffing the school's library and laboratories, or assisting in the school's teaching information technology infrastructure. Stipends for these awards vary depending upon the specific assignment. To be considered for such awards, students should complete the Schools' application for graduate assistantships available on the Schools' Web site at <http://cci.fsu.edu/>.

Scholarships and Fellowships

The college administers a program of scholarships resulting from the generosity of alumni and other friends. To be considered for a scholarship, students must submit the Schools' application for scholarships. The application and information about specific scholarships and fellowships is provided on the Schools' Web site at <http://cci.fsu.edu/>. In addition to these sources, prospective students should consult the Web site of communication and information professional associations' Web sites.

COLLEGE OF CRIMINOLOGY AND CRIMINAL JUSTICE

Dean: Thomas G. Blomberg; **Director of Undergraduate Studies, Criminology and Criminal Justice:** Patricia Warren Hightower; **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 law enforcement, 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 master's degree programs 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, 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.

The college is responsible for awarding a one-year University fellowship to an outstanding incoming graduate student. There are other University-wide fellowships that students may apply for through the president's, dean's, or graduate offices.

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.

All graduate students are expected to meet the equivalency of an undergraduate research methods/statistics course (CCJ 4700) before enrolling in CCJ 5705 or CCJ 5706. Those not meeting this requirement must take CCJ 5704 before enrolling in CCJ 5705 or CCJ 5706.

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 6741.

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 University residency requirement of completing twenty-four semester hours within a twelve month period. 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.

COLLEGE OF EDUCATION

Dean: Marcy P. Driscoll; **Associate Dean for Academic Affairs:** Amy R. Guerette; **Associate Dean for Faculty Development:** James P. Sampson; **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.

The 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 Programs of the College of Education

The College of Education offers graduate degree programs in numerous fields of study. The programs prepare students for positions in a variety of professional settings and enterprises: elementary and secondary schools, junior colleges, and universities; vocational centers; counseling service organizations; career development centers; personnel services; adult education; athletic training; testing; evaluation and measurement; institutional research; policy studies; organizational design and development; needs assessment for systems planning; and instructional design, development, and evaluation. 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
 - Educational Policy, Planning, and Analysis
- Foundations of Education
 - Sociocultural and International Development Education Studies (SIDES)
 - Social, Historical, and Philosophical Foundations of Education
- Higher Education
- Research and Evaluation Methods
 - Program Evaluation
- Certificate in Educational Policy
- 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 Psychology
- Counseling Psychology and Human Systems
 - Combined Program in Counseling Psychology and School Psychology
- Educational Psychology
 - Learning and Cognition
 - Sports Psychology
- Instructional Systems
 - Instructional Systems
 - Open and Distance Learning
 - Performance Improvement and Human Resource Development
- Measurement and Statistics
- Rehabilitation Counseling
- Certificate in Human Performance Technology
- Certificate in Online Instructional Development
- Certificate in Measurement and Statistics

School of Teacher Education

- Special Education
 - Special Education
 - Special Education Studies
 - Exceptional Student Education
- Visual Disabilities
- Early Childhood Education
- Elementary Education
- Reading Education/Language Arts
- English Education
- Social Science Education
- Master of the Science of Teaching, MoST Program
 - Foreign and Second Language Teaching
 - English Teaching
 - Mathematics Teaching
 - Social Science Teaching
- Certificate in Early Childhood and Family Intervention
- Certificate in Early Childhood Special Education
- Infant/Toddler Developmental Specialist Certificate (Offered through the Florida Department of Health with the College of Human Sciences)
- Certificate in Blended Online Learning and Teaching
- TESOL Certificate

Department of Sport Management

- Sport Management
- Certificate in Coaching

Facilities and Opportunities

The College of Education houses two college-wide centers and five departmental research and service centers that provide facilities and support for research undertaken by faculty members and students. College-wide centers include the Center for Policy Studies in Education and the Center for the Study of Teaching and Learning. Departmental research and service centers are the Center for Educational Research and Evaluation Services, Center for the Study of Technology in Counseling and Career Development, the Hardee Center for Women in Higher Education, The Florida State University School, and the Institute for the Study of Higher Education. In addition to these, 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 either a 3.0 grade point average (GPA) for their junior/senior years as an undergraduate or a score of 1000 on the Graduate Record Examinations (GRE). **All applicants to the college must submit a GRE score 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. The College of 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 departmental admissions criteria. Applicants that cannot produce a score of 1000 in the combined verbal and quantitative aptitude portions of the GRE must score a minimum of 400 on each section individually, per College of Education policy. Any applicant with GRE scores below 400 on either aptitude portion of the exam (and below 1000 combined) will be treated as an exception to College of Education Graduate Admissions Guidelines, and as such, will require final approval of the Academic Dean for full admission to a graduate degree program. **Note:** Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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 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, 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.**

Master's Degree Program

1. Admission as a regular graduate student in a degree program is required.
2. The major professor and supervisory committee should be selected and approved during the first semester of enrollment. The 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.
3. The program of study should be prepared, submitted, and approved during the first semester of enrollment. 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-two semester hours of graduate credit must be completed with a 3.0 GPA in course-type programs. Twenty-one semester hours of credit in the course-type program must be taken on a letter-grade basis (A, B, C). The department may require students in course-type programs to complete more than thirty-two semester hours.
 - b. A minimum of thirty semester hours of graduate credit must be completed with a 3.0 GPA in thesis-type programs. Eighteen semester hours of credit in the thesis-type program must be on a letter-grade basis.
 - c. Work taken more than seven years prior to graduation may not be used toward the degree.
 - d. Only six hours of 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 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 credit, to reach the aggregate maximum of twelve credit hours.

- e. The maximum number of 4000-level hours that may be included in the program of study and used towards the degree is six hours.
 - f. Students in thesis-type programs must be registered for a minimum of two hours of thesis credit in the semester that their degree will be awarded unless granted a waiver by the Graduate School.
4. Successful completion of a written comprehensive examination for course-type programs, an oral defense for thesis-type programs, or a 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 (2301 Stone Building) of the examination results, in writing, no later than the twelfth week of the semester. Students must have a 3.0 GPA in all graduate work to be eligible to register through the University Registrar and the department. Students also must have an approved program of study and supervisory committee form on file in the Office of Academic Services before clearance will be given. Students lacking these materials will not be cleared for final term degree posting.

Specialist Degree Program

The Specialist in Education degree is essentially an advanced master's degree. It is traditionally reserved for students with a prior graduate degree in a specific field of education. Requirements vary widely by department or program specialization.

1. Admission as a regular graduate student in a degree program is required.
2. The major professor and supervisory committee should be selected and approved during the first semester of enrollment. The 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.
3. The program of study should be prepared, submitted, and approved during the first semester of enrollment. The program of study must include all courses required for the degree, i.e., specialist comprehensive exam, specialist thesis hours, and specialist thesis defense, if applicable.
 - a. A minimum of thirty semester hours of graduate credit must be completed with a 3.0 GPA. Twenty-one semester hours of credit in the course-type program must be taken on a letter-grade basis (A, B, C). Eighteen semester hours of credit in the thesis-type program must be on a letter-grade basis. The department may require students to complete more than thirty semester hours.
 - b. At least half of all the coursework for degree must be taken from the College of Education.
 - 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 programs must be registered for a minimum of two semester hours of specialist thesis credit in the semester that their degree will be awarded unless granted a waiver by the Graduate School.
4. Successful completion of a written comprehensive examination for course-type programs, an oral defense for thesis-type programs, or a 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 (2301 Stone Building) of the examination results, in writing, no later than the twelfth week of the semester. Students must have a 3.0 GPA in all graduate work to be eligible to register through the University Registrar and the department. Students also must have an approved program of study and supervisory committee form on file

in the Office of Academic Services before clearance will be given. Students lacking these materials will not be cleared for final term degree posting.

Doctoral Degree Programs

1. Admission as a regular graduate student in a degree program is required.
2. The major professor and supervisory committee should be selected and approved during the first semester of enrollment. The 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 tenured.
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 should be prepared, submitted, and approved after passing the diagnostic/qualifying exam. 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. Students seeking the Doctor of Philosophy degree must disclose fulfillment of the University residency requirement on the program of study: twenty-four semester hours in three consecutive semesters or twelve months. Students seeking the Doctor of Education degree have the option of completing the University residency requirement by registering for thirty semester hours during a sixteen-month period.
5. 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 (2301 Stone Building) of the examination results, in writing, no later than the twelfth week of the semester. Students must have a 3.0 GPA in all graduate work to be eligible to register through the University Registrar and the department. Students also must have an approved program of study and supervisory committee form on file in the office of Academic Services before clearance will be given. Students lacking these materials will not be cleared for final term degree posting. In order to be considered 'complete' for final term degree clearance, a doctoral student must have the following documents on file with the Office of Academic Services:
 - a. An accurate program of study form complete with signatures of committee members and the department chair.
 - b. Departmental qualifying/diagnostic examination results.
 - c. Doctoral preliminary examination results and a copy of the Admission to Candidacy Form. Note that successful completion of the doctoral preliminary exam admits students to doctoral candidacy. No student may defend his or her dissertation earlier than six months from the date assigned a passing grade on the preliminary examination. The results of the preliminary examination must be submitted to the Office of Academic Services upon completion, no later than the twelfth 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 or DIS credits cannot be converted. Under no circumstance will a retroactive conversion of more than nine credits be approved.
 - d. A prospectus clearance form signed by the supervisory committee and department chair; an original, signed prospectus signature page; a prospectus title page; and, an electronic copy (on compact disc) of the prospectus.
 - e. The Manuscript Signature Form signed by all committee members and department chair. 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. A grade of PASS for the defense of treatise or dissertation requires at least a majority approval of the committee.

- f. The Final Term Degree Clearance form signed by the major professor and department chair, and approved by the Academic Dean.
6. A prospectus of the dissertation must be submitted to the department chair after passing the preliminary examination. It must be approved by the Academic Dean at least four months prior to the defense of the dissertation.
7. Students must register for a minimum of two hours of dissertation credit in each semester that work is in progress on the dissertation. A minimum of twenty-four hours of dissertation credit must be included in the degree program. Dissertation credits may not be taken until the student is formally admitted to candidacy.
8. Students must register for a minimum of two semester hours of dissertation credit in the semester their degree will be awarded.

Office of Academic Services

Co-Directors: Jim Allen, Undergraduate Services; Sydney Smith, Graduate Services

The Office of Academic Services 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, Academic Services has been tasked with:

1. processing applications for admission and readmission to the College of Education;
2. maintaining the Dean's academic records for all students pursuing degrees in Education;
3. monitoring students' progress toward degree;
4. screening and approving students for admission to Teacher Education;
5. conducting required graduation clearances and approving students for teacher certification;
6. providing consultative and administrative services for the students and faculty of the College.

Planning Guide to Educator Preparation Programs

Inventory of State-Approved Programs

The Florida State University teacher education programs have been designed to address the importance of democratic values and institutions, the contributions of various ethnic groups to society and to stress character development, which encourages appreciation of diversity in a pluralistic society. Students planning to complete a teacher education program at The Florida State University must meet all the conditions listed below to be eligible for degree conferral.

The following College of Education graduate programs have been approved by the Florida Department of Education (DOE) as Advanced Initial Certification Teacher Preparation Programs:

- Exceptional Student Education/ESOL, DOE Certification Area 430, K-12/Endorsement
- Elementary Education/ESOL, DOE Certification Area 494, K-6/Endorsement
- English Teaching, DOE Certification Area 516, Grades 6-12
- Foreign and Second Language Teaching, DOE Certification Area 518, K-12
- Mathematics Teaching, DOE Certification Area 517, Grades 6-12
- Reading Education/Language Arts, DOE Certification Area 212, K-12
- Visual Disabilities, DOE Certification Area 333, K-12
- Social Science Education, DOE Certification Area 377, Grades 5-9/6-12
- Social Science Teaching, DOE Certification Area 512, Grades 6-12

The following graduate programs have been approved by the DOE as Advanced Initial Certification Teacher Preparation Programs; they are listed with the name of the Florida State University College in which they are located:

- Art Education (Visual Arts, Theatre, and Dance), DOE Certification Area 114, K-12
- Music Education (Music), DOE Certification Area 202, K-12

The following Florida State University graduate programs (listed by College) have been approved by the DOE as Other School Personnel Preparation Programs, leading to initial certification at the cited degree level:

- Master's in Educational Media Specialist (Communications and Information), DOE Certification Area 324, PK–12
- Master's in Educational Leadership Administration (Education), DOE Certification Area 285, K–12 Leadership
- Specialist in School Psychology (Education), DOE Certification Area 330, PK–12

Criteria for Admission and Application to an Educator Preparation Program

1. Achievement a score of 1000 on the combined aptitude portions of the Graduate Record Examination (GRE), **or**, have passed all four sections of the Florida Teacher Certification Exam, General Knowledge Test;
2. Have earned a baccalaureate degree from a regionally-accredited institution;
3. Submit a Graduate Application for Admission to Teacher Education to the Office of Academic Services, *2301 Stone Building*.

Note: This application is distinct from admission to the College or a specific program.

4. Approval of the respective department in accordance with departmental criteria; and,
5. Approval of the Office of Academic Services.

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.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Subject Area Specialization/Professional Education/ Clinical Experience Curricula

1. At least thirty semester hours completed in the subject specialization area as determined by the student's program;
2. 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;
3. 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.

Note: Students should consult with a program adviser for specific course requirements.

Continuation and Graduation Requirements of a Teacher Education Program

Students must meet the following requirements to continue and graduate from a teacher education program:

1. Maintain an overall 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 above under 'Planning Guide to Teacher Education Programs';
4. Achieve a passing score on each of the General Knowledge Test, the Professional Skills Test, and Subject Area Test on the Florida Teacher Certification Exam (FTCE) prior to completion of program requirements;
5. Successfully complete the student teaching experience;
6. 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
7. Obtain final approval of the appropriate academic program and the Office of Academic Services.

Note: These requirements are distinct from program completion/graduation requirements.

Recommendation for a Teaching Certificate

Upon completion of an approved teacher education program and conferral of the degree from The Florida State University, students are eligible to receive a recommendation for a standard teaching certificate.

Office of Intern Support

Director: Patrick Malone

The Office of Intern Support is responsible for the assignment of students to student teaching experiences. The office works with teacher education 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 Intern Support, *2301 Stone Building* (combined with the Office of Academic Services), 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 in those counties listed below **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.** Exceptions to this policy will be made only through successful appeal on the part of a student to the University Student Teaching Appeals Committee. Student teachers representing initial certification programs in Communication, Information, Visual Arts, Music, Arts and Sciences, and Human Sciences will also be concentrated in those counties listed **but may** be placed in additional locations should program certification requirements so dictate. 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.

Placement Locations

Area I—Gadsden, Jefferson, Leon, Madison, Taylor, and Wakulla counties

Area II—Bay, Calhoun, Franklin, Gulf, Holmes, Jackson, Liberty, Okaloosa, Walton, and Washington counties

Area III—Lake and Orange counties

Area IV—Hillsborough, Manatee, Pasco, Pinellas, Polk, and Sarasota counties

Area V—Pembroke Pines K-5 Charter School (Broward county)

Other areas as determined by the University Director of Teacher Education.

Academic programs are expected to inform their students of departmental placement policies well in advance of the semester of student teaching so that students may have the opportunity to plan appropriately. Also note that final term placement is conditional on fulfillment 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 Intern Support (*2301 Stone*) on the following timetable:

- For Spring semester placement, submit application no later than the deadline published in the Student Teaching Calendar; the calendar is located on the OASIS Web site at <http://www.coe.fsu.edu/Student-Academic-Services-OASIS/Student-Teaching> and in the OASIS suite, *2301 STB*.
- For Fall semester placement, submit application no later than the deadline published in the Student Teaching Calendar; the calendar is located on the OASIS Web site at <http://www.coe.fsu.edu/Student-Academic-Services-Oasis/Student-Teaching/Future-Student-Teachers> and in the OASIS suite, *2301 STB*.

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.

Criteria for Admission to Student Teaching

The following criteria must be fulfilled prior to placement for student teaching:

1. Admission to Teacher Education outlined above under ‘Criteria for Admission and Application to Teacher Education Program;’
2. Completion of at least one semester in residence at The Florida State University;
3. Successful completion of Subject Area specialization and Professional Education coursework outlined under ‘Subject Area Specialization/ Professional Education/Clinical Experience Curricula;’
4. Completion of departmental requirements in computer literacy;
5. 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,
6. Successful completion of pre-internship clinical experience requirements as set by the program or the University.

FAMU—FSU COLLEGE OF ENGINEERING

Dean: Yaw Yeboah; **Associate Dean:** Reginald Perry; **Assistant Dean:** Braketta Ritzenthaler

The FAMU-FSU College of Engineering was authorized by the 1982 Legislature as a joint program between Florida A&M University and The 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 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 respectively. The degree is granted by the College of Engineering through the university where the student is registered.

The mission of the College of Engineering is:

- 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 sq. ft. of classroom, office and laboratory space in a building complex especially designed for engineering education. It is located off the main campus of each university in an area adjacent to Innovation Park, which also houses the National High Magnetic Field Laboratory, 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 clean industry operations. The College also maintains other research centers, including the Center for Intelligent Systems, Control, and Robotics (CISCOR), Energy and Sustainability Center (ESC), Florida Center for Advanced Aero-Propulsion (FCAAP), Applied Superconductivity Center, Future Renewable Electrical Energy Delivery and Management Systems Center (FREEDM), and the Institute for Energy Systems, Economics and Sustainability (IESES).

Each department of the college operates specialized laboratories for teaching and research that are listed in the description of its programs.

The College operates for the common use of all programs a computing facility, a library and reading room, and machine and electronics shops.

Library

The mission of the College of 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 to advance 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 newly renovated College of 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 staffed by a full-time librarian and several assistants who offer research assistance in person, over the telephone, 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. Group study tables, lounging stations, and tutoring areas were all part of the innovative transformation of the engineering library in May 2011.

Computing Facilities

Students have access to various computing resources at the College of Engineering. Due to the unique requirements of engineering computing and the off-campus location of the College, the College is relatively autonomous in providing service to engineering students. The College has over 2,000 computing devices connected to its local network, managed by the College's Communication and Multimedia Services (CMS) unit. Computers connect to

the College's network via 1Gbps and 100Mbps Ethernet connections. 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 twenty-four 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 twenty-four hours a day, 365 days a year. A group of Sun Solaris and Linux servers backed by a Storage Area Network, as well as a number of independent Solaris, Windows, and Linux server platforms, provide a range of computing services to the College user community. CMS 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 are provided, including major general-purpose packages, as well as special applications oriented toward particular disciplines. The College's research labs 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 at the College 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 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. In addition to the local wired network, the College provides wireless LAN services throughout the facility for students who may want to use their own laptops to connect to the College's computing resources. The College has state-of-the-art instructional classrooms. The multimedia equipment in every classroom generally includes LCD projector, overhead projector and/or document camera, VCR, 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 and the Florida Engineering Education Delivery System (FEEDS); these rooms have two studio cameras and one document camera connected to a desktop PC with a scan converter to display Web pages. 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 Office of Technology Integration (OTI); the National High Magnetic Field Laboratory (the 'Mag Lab'); the Center for Advanced Power Systems (CAPS); the High Performance Materials Institute (HPMI) and the Aeropropulsion, Mechatronics and Energy Building. The college also operates the Tallahassee Challenger Learning Center, a K-12 STEM outreach facility serving the Southeast region of the U.S. Located in downtown Tallahassee, the Center houses a 3-D IMAX theatre, planetarium, and Challenger Space Mission and 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 Computing 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, Civil and Environmental, Electrical and Computer, Industrial and Manufacturing, and Mechanical Engineering offer both thesis and non-thesis programs for the Master of Science degree. 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 Masters of Engineering (MEng) degree program option. This is a professional Master's degree for 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 Web site at <http://www.eng.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 the department, respectively. 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). Students applying to the MEng program may also submit test scores from the Fundamentals of Engineering (FE) examination or Principles and Practice of Engineering (PE) examination. All candidates must submit official exam scores prior to being admitted as a regular graduate student.
4. An international applicant whose native language is not English must have taken the Test of English as a Foreign Language (TOEFL) within the last five years. Minimum test scores on the TOEFL are set by individual academic departments. See the College of Engineering Web site at <http://www.eng.fsu.edu> for more information.
5. Satisfy any admission requirements of the department.

For further details on graduate or research programs, contact the College of Engineering at (850) 410-6423 or by e-mail at studentsupport@eng.fsu.edu. The college also maintains a Web site at <http://www.eng.fsu.edu> with detailed information on all its graduate programs.

THE GRADUATE SCHOOL

Dean: Nancy H. Marcus; **Associate Dean:** Judith Devine

The first graduate degree was a Master's 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 102 master's degrees, nineteen specialist and advanced master's degrees and sixty-seven doctoral degrees. Professional degrees are also offered in Law and Medicine. In addition, a variety of opportunities are available for students interested in advanced degrees, including interdisciplinary degree programs, joint degrees, dual degrees, and combined bachelor's/master's degree programs. 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

In 2009 the Graduate School assumed direct responsibility for the new interdisciplinary master's degree in Materials Science. See the "Interdisciplinary Program in Materials Science" 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, contact Dr. Anne Marie West at 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, visit the PIE Web site at <http://pie.fsu.edu>.

For more information see the 'Professional Development' section in this chapter.

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. Many graduate students receive financial support (stipend and tuition waivers) as **Teaching Assistants, Research Assistants, or Graduate Assistants**. Interested students should contact 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**, and the **Graduate School Student Leadership Award**.

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 Fellows 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. To earn the PFF Certificate, students 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 fellows and adjunct/visiting faculty. Fellows 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/post-docs/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://gradschool.fsu.edu/pff.html>, 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, 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://gradschool.fsu.edu/Professional-Development/Professional-Development-Workshop-Series>.

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).

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 and Spring 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 May 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) 644-2947, or e-mail pie-info@fsu.edu.

COLLEGE OF HUMAN SCIENCES

Dean: Billie J. Collier; **Associate Dean:** Mary Ann Moore; **Mack and Effie Campbell Tyner Eminent Scholars:** Konrad Bloch (deceased), John Kinsella (deceased), William Ruben, William Jerome Vereen, Richard Lerner, James Banks, Richard Palmiter, Susan Watkins; **Eminent Scholar Chair:** Frank Fincham; **Deans Emeritae:** Hortense Glenn (deceased), Penny A. Ralston, Margaret A. Sitton

The mission of the College of Human Sciences is to address global challenges and opportunities related to the physical, behavioral, psycho-social, and economic factors influencing the health and development of individuals, families, and communities. Human Sciences is an interdisciplinary unit that prepares scholars who seek new knowledge and innovative solutions to the challenges of contemporary society.

Historically, the college has been a national leader in graduate education and research. Courses in the human sciences, formerly home economics, have been offered at The Florida State University since 1905. In 1926–27 the first Master of Science (MS) in home economics was offered, and in 1941 the Doctor of Philosophy (PhD) degree program in home economics was approved. Over the years a tradition of excellence has been established to ensure quality graduate study. The school was designated a college in 1976 in recognition of scholarly faculty, outstanding alumni, and nationally recognized programs and research. In 1989, the name was changed to the College of Human Sciences to appropriately describe the breadth and focus of academic study found in the college.

The Florida State University is the comprehensive doctoral-granting institution in the human sciences in the state of Florida. For more than fifteen years, the College of Human Sciences has been one of the top colleges and universities granting the PhD in human sciences in the nation. The College of Human Sciences is organized into three departments: Family and Child Sciences; Nutrition, Food and Exercise Sciences; and Retail Merchandising and Product Development. In keeping with the University's role as a comprehensive graduate research institution, the college program is based on the belief that sound intellectual development relies on an understanding of the underlying theories, principles, and concepts in each area of study and that research is an integral part of that endeavor. Both faculty and students are provided opportunities to test theories and to generate new knowledge through scholarly contributions to research.

The College of Human Sciences established the Mack and Effie Campbell Tyner Eminent Scholar Chair in 1986, the nation's first million dollar endowed chair in the human sciences. The first Tyner Eminent Scholar was Dr. Konrad Bloch, Nobel Laureate and Emeritus Higgins Professor of Biochemistry at Harvard. Since that time the chair has been held by Dr. John Kinsella, General Foods Distinguished Professor of Food Science at Cornell University (1989); William S. Ruben, former Chief Executive Officer for Jordan Marsh, Florida and Bonwit Teller (1990); William Jerome Vereen, President and CEO of Riverside Manufacturing Company (1993); Dr. Richard M. Lerner, who was then the Director of the Institute for Children, Youth and Families as well as Professor of Family and Child Ecology at Michigan State University (1994–95); James Banks, Professor of Education and Director of the Center for Multicultural Education, University of Washington (1997–98); Richard Palmiter, Professor of Biochemistry, University of Washington (1998–99); and Susan Watkins, professor emeritus, Cornell University (1999–2000). Additionally, the Eminent Scholar Chair is currently held by Dr. Frank Fincham, Director of The FSU Family Institute.

Facilities and Fellowships

The Department of Family and Child Sciences (FCS) has computer facilities and use of a multimedia lab for faculty and graduate students to conduct research. The Multimedia Lab is located in the College of Human Sciences and has advanced software application and multimedia equipment. Two newly designed teaching laboratories house projects addressing the parenting needs of at-risk families and mental health outreach efforts for special populations. The Center for Couple and Family Therapy provides a variety of clinical services and evidence-based interventions to the community and is equipped for both intervention and observational research. The FSU Family Institute located in the Longmire Building is also equipped with laboratory space for observational and experimental studies. 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.

The Department of Nutrition, Food, and Exercise Science (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 study cell cultures, animals, 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, particularly resistance 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 Institute of Sports Sciences and Medicine** houses a state of the art Human Performance laboratory. Designed for testing competitive athletes of all ages, the laboratory provides an opportunity for investigators to conduct multidisciplinary research in human and athletic performance, including the prevention and treatment of athletic injuries.
4. **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. **Body Composition Laboratory** provides a setting for bone and mineral metabolism which 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 (MR) technology to the development of 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 Lab** 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 different techniques for the measurement of energy intake and energy expenditure.

The Center for Advancing Exercise and Nutrition Research on Aging (CAENRA) within the Department of Nutrition, Food and Exercise Sciences focuses on implementing age-related disease and treatment paradigms in animal models and the use of high magnetic field magnetic resonance (MR) techniques to detect and monitor treatment efficacy. NFES has partnered with the NSF-supported National High Magnetic Field Laboratory in this effort.

The Department of Retail Merchandising and Product Development (RMPD) has laboratories that enhance and enrich the student's education. The RMPD laboratories include:

1. **Chemical and physical textile laboratories** with a conditioning room and sensory evaluation laboratory.
2. **Macy's Merchandising Laboratory** allows students to become proficient in merchandising of hard as well as soft lines.
3. **Office Depot Technology Complex** provides hands-on laboratory with retail industry adopted software where students use real-world retail reporting and other technology-related skills.
4. **Product Development Laboratory** allows for depth in the product development process from concept to consumer.

The Center for Retail Merchandising and Product Development creates partnerships between retail businesses and FSU students and faculty to promote education, research, and service. It offers the retail industry and its supporting industries an educated and qualified workforce, sponsored research opportunities in areas of interest, and expertise to help meet targeted needs.

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 the PhD in Human Sciences and the PhD in Marriage and Family Therapy 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 Science with a major in:

Exercise Physiology
Sports Sciences

Family and Child Sciences with a major in:

Family and Child Sciences

Food and Nutrition with a major in:

Nutrition and Food Science

Retail Merchandising and Product Development with a major in:

Global Merchandising and Product Development

Doctor of Philosophy Degree Programs

Human Sciences with emphasis in one or more of the following:

Family Relations
Nutrition and Food Science

Exercise Science with a major in:

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 test scores on the Graduate Record Examinations (GRE). All prospective students must take the GRE prior to admission regardless of their grade point average. Applicants for the doctoral and master’s programs must have three letters of recommendation. The PhD program in Marriage and Family Therapy requires personal interviews at the time of application to the program. 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

There are two types of programs for the master’s degree: the thesis-type and the course-work type. In the college there are three course-work options: special project, practicum, and all coursework. 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 diagnostic examination, residence, 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 (two hours). 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.

Certificate Programs

The **graduate certificate in retail merchandising** in the Department of Retail Merchandising and Product Development provides graduate level competency in retail store management and retail buying for academically talented students who are completing an undergraduate degree in merchandising. The culminating activity of the certificate is an internship with a retail organization.

Family Studies, a graduate certificate program offered through the Department of Family and Child Sciences, is designed for undergraduate and graduate students in human sciences and other social and behavioral sciences who wish to develop a deeper understanding of the complexity of relationships inherent in today’s families to work more effectively with them. The certificate requires twelve credit hours with a supervised research experience. The certificate program is designed to be completed concurrently with the bachelor’s degree, and allows students to double-count graduate courses for both the BS degree and the graduate certificate.

Joint Degree Program

The joint degree program in Law and Family and Child Sciences permits concurrent completion of a law degree and a Master’s degree in Family and Child Sciences. The primary purpose of the joint degree is to provide law students with foundational knowledge about the nature of family life and dynamics as they interact with legal issues and processes. Also, the joint degree program equips law students with knowledge of and skills in relationship dynamics to enrich their interactions with all stakeholders in the legal system.

COLLEGE OF LAW

Dean: Donald J. Weidner; **Associate Deans:** Nancy L. Benavides, Curtis Bridgeman, Donna R. Christie, Robin Kundis Craig; **Assistant Deans:** Janeia Daniels, Catherine Miller; **Associate Vice President for Development:** Mark Pankey; **Director of the Research Center:** Faye Jones

Florida State 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 (2011) ranks the College of Law in the top fifty American law schools, and also ranks the law school's environmental-law program sixth in the nation. *Leiter's Law School Rankings* (2010) rates our faculty the nation's twenty-third best in terms of per capita scholarly impact. *National Jurist* magazine has ranked the school as one of the nation's top ten "Best Value" law schools, based on employment rate, bar passage, tuition, and indebtedness. Additionally, *Hispanic Business* magazine (2011) ranked the law school as the nation's third best law school for Hispanics. Florida State University College of Law students have extremely strong credentials. The current student body represents thirty-two states, fifteen countries, and 191 colleges and universities. Twenty-five percent of the students in the entering 2011 class have LSAT scores of 163 or higher and the average LSAT is 162. The median GPA is 3.47. Our students continue being successful after they enroll in our school. Since 2010, the Moot Court Team has won first place in one international competition and six national competitions. In addition, the Student Bar Association received the 2010 Public Interest National Achievement Award from the Law Student Division of the American Bar Association. In both 2008 and 2009, the Law Student Division selected Florida State Law as the "SBA of the Year." Our Black Law Students Association (BLSA) was named National Chapter of the Year for 2010-2011.

Because of its liberal-arts orientation, 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 scholars who make it a priority to be available to students inside and outside of the classroom. In a survey of 18,000 law students, *Princeton Review* ranked the Florida State faculty as tenth best in the nation in terms of accessibility and eleventh best in terms of teaching quality.

Florida State offers law students a wealth of legal employment opportunities. Located in Tallahassee, a city with 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. Ninety-one percent of the class of 2010 was placed within nine months of graduation, most of them in private firms, according to *U.S. News & World Report* methodology.

Florida State Law offers two unique programs to undergraduates interested in attending law school. The Summer for Undergraduates program is the largest of its kind and has become a model for other law schools in the nation. Approximately sixty undergraduate college students are chosen to participate in this month-long program which 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 Affairs* at (850) 644-7338 or saffairs@law.fsu.edu.

Florida State Law also offers an honors program to FSU undergraduates. Each year, a select number of Honors Program undergraduate students are invited to become members of the FSU 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 FSU 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 the 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 162 or higher and an undergraduate GPA of at least 3.6; 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

The College'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, and business, with certificate programs in all of these areas. Florida State Law also has one of the strongest criminal law programs in the region.

The law school 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 Law school's advocacy teams are regionally and nationally competitive.

Special Programs

Florida State Law has especially strong programs in three areas: environmental law, international law, and law and business, with certificate programs in all of these areas. The law school's program in environmental law is recognized as one of the best in the country. The law school also has one of the strongest criminal law programs in the region. For more information on these programs, please visit http://www.law.fsu.edu/academic_programs/index.html.

Florida State Law offers nine joint-degree programs in cooperation with other colleges, schools, and departments at Florida State. The joint degrees bring together law with business, economics, family and child sciences, information studies, international affairs, public administration, social work, sport management, as well as urban and regional planning.

Building on its highly ranked environmental law program, Florida State Law offers a Master of Laws (LLM) in Environmental Law and Policy. The law school's newest degree offering gives Juris Doctor (JD) holders the opportunity to concentrate in or enhance their knowledge of environmental law, land use law, natural resources law, and energy law. Florida State Law's program is designed to provide LLM students with individualized, one-on-one attention. Incoming students are matched with program faculty members who will mentor them and help design a curriculum that will best suit their interests, educational background and professional needs.

The law school also offers an LLM program 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.

Additionally, Florida State Law offers one of the most extensive externship programs in the United States, with more than eighty placements throughout Florida and elsewhere. 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 foster care and health care access cases to child support and juvenile delinquency cases.

Summer Program in Law at Oxford

The College of Law conducts a summer program in Oxford. 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 common law and its institutions in their original setting. Since its establishment in 1973, 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.

For information contact: *Director, The Florida State University Summer Program in Law at Oxford, Tallahassee, FL 32306-1600; (850) 644-4578; http://www.law.fsu.edu/academic_programs/international_law/oxford/index.html.*

Academic Policies

All academic policies of the College of Law can be found at: http://www.law.fsu.edu/current_students/rules/index.html.

Admission Requirements

For August admission, students must apply one year in advance, between September 1st and March 15th. The College of Law enrolls only one 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. Files must be complete by March 15th to receive full consideration.

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 thirty-two states, fifteen countries, and 191 colleges and universities.

Admission to the College of Law is a competitive process; twenty-five percent of the students in the 2011 entering class had LSAT scores of 163 or higher, the average LSAT score was a 162, and the median GPA was a 3.47.

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. For more information about the LSAT, please visit <http://www.lsac.org>. Registration with the Law School Data Assembly Service is also required.

For more information about the admissions process, please visit http://www.law.fsu.edu/prospective_students/index.html or call (850) 644-3787.

Student Services

The **Student Affairs Office** is responsible for coordinating a number of different services, activities, and programs for the benefit of all law students. The Student Affairs Office assists students in all facets of student life, from financial aid to the adjustment to law school. The **Placement Office** within the college assists students in finding employment both during and after law school. The primary goal of the Placement 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 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

Dean: John P. Fogarty; **Senior Associate Dean for Academic Affairs:** Alma Littles; **Associate Dean for Health Affairs:** Leslie Beitsch; **Senior Associate Dean for Research and Graduate Programs:** Myra M. Hurt; **Associate Dean for Student Affairs and Admissions:** Christopher Leadem; **Assistant Dean for Student Affairs:** Robert Campbell; **Assistant Dean for Admissions:** Graham Patrick; **Associate Dean for Medical Education:** Mary Johnson; **Associate Dean for Curriculum Development and Evaluation:** Lynn Romrell; **Associate Dean for Faculty Development:** S. Dennis Baker; **Assistant Dean for Faculty Development:** Gregory Turner; **Assistant Dean for Information Management:** John Van Wingen; **Senior Assistant Dean for the Regional Medical School Campuses:** Paul McLeod (Pensacola Campus); **Assistant Deans for the Regional Medical School Campuses:** Bruce Berg (Sarasota Campus), Randall Bertolette (Fort Pierce Campus), Luckey Dunn (Daytona Beach Campus), Mel Hartsfield (Tallahassee Campus), Michael Muszynski (Orlando Campus); **Director of Rural Health:** Maggie Blackburn; **Director of the Clinical Skills and Simulation Center :** Debra Danforth; **Director of the Medical Library:** Barbara Shearer

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.

The first two years of medical school, the basic sciences and early clinical exposure are taught at The Florida State University and housed in the John D. 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 D. 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 D. 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 The Florida State University.

The Clinical Skills and Simulation Center

The Clinical Skills and Simulation Center, located in the John D. 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.

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 twelve 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 twelve weeks of electives in the year four; 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://www.med.fsu.edu/pdf/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.

Honors Medical Scholars Program

The FSU College of Medicine, in conjunction with the FSU Honors Office, has established a program that 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 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 three 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, teaching at least two semesters, 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 <http://www.med.fsu.edu/index.cfm?page=biomedicalSciences.phdBioMed>.

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://www.med.fsu.edu/pdf/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 The 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 http://med.fsu.edu/curr_advising.asp). 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 (<http://med.fsu.edu/?page=phdAdmissions.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 Admission Office through their Web site at <https://admissions.fsu.edu/gradapp/>.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

COLLEGE OF MOTION PICTURE ARTS

Dean: Frank Patterson

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 College provides state-of-the-art motion picture equipment and studio facilities for production and postproduction 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. Frank Patterson, Dean of the College of Motion Picture Arts, has more than twenty years experience in the film and television industry as a writer, director, producer, editor, and consultant. He is joined by eighteen faculty members, all of whom are specialists in the areas of producing, writing, directing, cinematography, visual effects, 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 these also have a strong record as research scholars and as writers of fiction. The faculty also includes visiting professors from the field 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 the University Center "A" Building on The Florida State University campus in Tallahassee. Considered one of the finest facilities in the world devoted exclusively to film education, it includes two sound stages; a recording stage with Foley and ADR capabilities; a 120-seat screening theatre and three smaller screening rooms; three digital audio mixing suites; a computer laboratory; a set-building shop; a 35mm archive of feature films; a 5,000 title collection of films on videotape, DVD, and laserdisc; a large production research library; and digital editing suites for picture and sound. Facilities are available for both digital (HD, 2K, 4K, 5K) and film (16mm, 35mm) production.

The College of Motion Picture Arts also operates facilities in West Palm Beach for the delivery of major classes in its Animation and Digital Arts program. Co-located with the Digital Domain Institute, these facilities include: a sound stage; recording stages with Foley and ADR capabilities; a 120-seat theater; two screening rooms for dailies, color timing, and audio mixing; computer labs for non-linear editing, visual effects, and animation; storyboarding and previsualization rooms; and a learning resource center.

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 craftspersons 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. Writing students will complete sixty-one semester hours, and production students will complete

ninety 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.

Admission to the Graduate Program

Admission to the College of Motion Picture Arts graduate program is of limited access, with twenty-four production and six writing students admitted each year, making admission selective and competitive. Prospective students must make 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/mfa>. Required supporting materials include: a 500–1000 word statement of purpose describing their artistic work, creative influences, personal objectives, relevant background, and career goals; three letters of recommendation; a professional/creative resumé; and transcripts. As an option, production applicants may submit a sample of their best work (video, photographs, creative writing sample, etc.). Writing applicants must submit three samples as specified supporting materials. Detailed information is available online at <http://film.fsu.edu>. Students applying to the Motion Picture Arts - Production major are not required to take the Graduate Record Examination (GRE) but official GRE scores must be reported for the Motion Picture Arts - Writing major.

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.

Assistantships

The College of Motion Picture Arts awards a limited number of graduate assistantships. 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.finaid.fsu.edu>.

COLLEGE OF MUSIC

Dean: Don Gibson; **Senior Associate Dean:** Seth Beckman; **Associate Deans:** William Frederickson, Leo Welch

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.

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 in Philosophy (PhD) degree in music (musicology and music theory and composition); and the Doctor of Music (DM) degree in composition or in performance (bassoon, clarinet, 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.

Certificate Programs

In addition to its degree programs, the College of Music offers a number of certificate programs that provide an additional specialized area of emphasis for graduate students. These include certificate programs in arts administration, college teaching, early music, jazz studies, music leadership, music of the Americas, organ performance, pedagogy of music theory, piano pedagogy, sacred music, special music education, and world music. 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 and recently renovated, 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 air-conditioned and 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 145,000 scores, sound recordings, video cassettes, 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 electronic 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.

Assistantships

Graduate assistantships are available in most areas of study in the College of Music. The annual stipend range is \$4,000 to \$12,000, depending upon the amount of 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.

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 must also 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

Offered to candidates in preparation for roles as leaders in designing, implementing, and managing arts activities. The requirements include seven

to eight semester hours in music core courses, fourteen semester hours in arts administration core courses, eight to nine semester hours in appropriate electives, and nine semester hours in an arts administration internship in music.

Master of Music (MM) in Performance

Voice, Organ, Violin, Viola, Violoncello, Double Bass, Harp, Guitar

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 nonmusic electives.

Special note for Voice Performance: 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.

Piano

Twelve semester hours in applied music, including recital; four semester hours in solo piano literature; two semester hours in ensemble; two semester hours in music bibliography; six semester hours in music history and music theory; and six semester hours in music and/or non-music electives.

Accompanying

Eleven semester hours in applied music, including recitals; two semester hours in chamber music ensembles; two semester hours in vocal or instrumental accompanying; four semester hours in vocal or instrumental literature; two semester hours in music bibliography; six semester hours in music history and music theory; and six semester hours in music and/or non-music electives.

Piano Pedagogy

Twelve semester hours in applied music, including recital, practicum, and a research project; six semester hours in advanced piano pedagogy; four semester hours in keyboard literature; two semester hours in accompanying; 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 to five 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; eleven 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 two semester hours in ensemble; and three to five semester hours in music electives.

Jazz Studies

Twenty-one 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; six semester hours in music history and music theory; and two semester hours in music and/or non-music electives.

Master of Music (MM) in Theory

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.

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; two semester hours of applied music; six semester hours in thesis; and three semester hours in a music or nonmusic 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 adviser); six semester hours in thesis; three semester hours in world music ensembles; and three semester hours in electives.

All musicology candidates will be required to develop a reading knowledge of German or French (or, for ethnomusicology only with the adviser's approval, a working knowledge in a language related to the candidate's thesis area).

Master of Music (MM) in Opera Production

Coaching Emphasis

Twelve semester hours in applied music; four semester hours in opera literature; two semester hours in vocal/instrumental accompanying; 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 Emphasis

Twelve 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; two semester hours in an opera directing project; and nine semester hours in music or non-music electives.

Master of Music (MM) in Therapy

The graduate degree in music therapy requires a minimum of eighteen 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.

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.

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)

Sixteen 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 six semester hours in a non-music subject area.

A candidate for the Master of Music Education degree, with the approval of the graduate music education committee, may elect a non-thesis plan which requires a minimum of thirty-six semester hours of coursework, including 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 admission 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 and Composition

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 (piano, organ, guitar, voice, violin, viola, violoncello, double bass, flute, oboe, clarinet, saxophone, bassoon, trumpet, horn, trombone, tuba, or percussion): 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 eight semester hours is required in music history or music theory/composition; two semester hours in music bibliography; and thirty semester hours of electives, of which at least twenty-two 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 eight 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 eight semester hours is required in music history or music theory/composition; two semester hours in music bibliography; and thirty semester hours of electives, of which at least twenty-two semester hours must be in music electives.

Flute, Oboe, Clarinet, Bassoon, Saxophone, Trumpet, Horn, Trombone, Tuba, 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 eight semester hours is required in music history or music theory/composition; two semester hours in music bibliography; and thirty semester hours of electives, of which at least twenty-two 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, eight semester hours are required in music history, music theory, and/or composition; two semester hours in music bibliography; and thirty semester hours of electives, of which at least twenty-two 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 preliminary examination is administered under University-wide regulations, except it is not mandatory to complete this examination six months prior to graduation.
3. 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 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 defend by no later than the Format Approval Deadline in the semester of intent to graduate. Consult the Graduate School Blackboard site, GradSpace, for more information.

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, via the GradSpace Web site. 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 adviser or to the appropriate college or departmental office for subsequent delivery to the clearance adviser 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 adviser.

The final version of the dissertation/treatise that is approved by the supervisory committee must be submitted electronically to the university manuscript clearance adviser 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

Interim Dean: Dianne Speake

The mission of the College of Nursing is to develop nursing leaders for professional practice and research in diverse settings. The college offers a Master's of Science in Nursing (MSN) degree with role specialization as a nurse educator or nurse leader. 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 or health systems leader.

Master of Science in Nursing (MSN) — Programs of Study

The following program of study is offered:

- Nurse Educator
- Nurse Leader

Doctor of Nursing Practice (DNP) — Programs of Study

The following program of study is offered:

- Family Nurse Practitioner and Health Systems Leader

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

Upon graduation from the MSN program, nurse educators are eligible to teach nursing in collegiate and post-secondary educational institutions and nurse leaders plan, manage, and evaluate cost-effective and evidenced-based nursing at the microsystem level. 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 Registered Nurse Practitioner (ARNP) in the state of Florida. Certification in specialty areas may be sought after graduation.

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.

Federal nurse traineeships may be awarded by the graduate committee of the College of Nursing for full-time study. Applications for financial support are considered each semester. 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. Two 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 admission. Applicants will be provided with fingerprint cards and waiver forms at the time they apply to the College of Nursing. The cost of the background check is approximately \$50.00 and must be paid by the student.

Statement of Professional Conduct

While enrolled in the College of Nursing graduate program, the student is 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 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

No clinical course for which a student receives a grade of unsatisfactory or a "B-" (2.75 quality points) or below may 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 graduate program director;
2. Provide written justification for reinstatement to the College of Nursing 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

Dean: David W. Rasmussen; **Associate Deans:** Robert E. Crew, Jr., Graham C. Kinloch

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.

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, Abba Lerner Professor in Economics, 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.

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 and Family Center for the Study of Critical Issues in Economic Policy and Government; the Leroy Collins Institute on Public Policy; the Florida Public Affairs Center; the Gus A. Stavros Center for the Advancement of Free Enterprise and Economic Education; and interdisciplinary programs in Aging Studies, Asian Studies, African-American Studies, Environmental Studies, Public Health, Social Sciences, International Affairs, Law and Society, Russian and East-European Studies, Latin American and Caribbean Studies.

The College offers programs leading to the master's degree in 13 fields, the Doctor of Philosophy (PhD) degree in six fields, and numerous graduate certificates.

Master's Programs

Asian Studies
Demography
Economics
Geography
Geographic Information Science
International Affairs
Political Science
Applied American Politics and Policy
Public Administration (Master of Public Administration)
Public Health (Master in Public Health)
Russian and East European Studies
Sociology
Applied Social Research
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-degree programs

Joint-degree programs, requiring fewer total hours than the two degrees would separately, are offered as follows:

Master of Public Administration (MPA) and Master of Science in Planning (MSP)
Master of Science (MS) in Economics and Juris Doctor (JD) in Law
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 Demography (MS)
Master of Science in Planning (MSP) and 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:

Collaboration and Dispute Resolution
Emergency Management
Florida City and County Management
Health Services Administration and Policy
Human Resource Management
Online Geographic Information Systems
Public Administration and Policy
Public Financial Management
Real Estate Development
Urban Design

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*.

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. Some programs require a master's thesis of all candidates, others do not. Entry to joint-degree programs

normally 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 only 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 only normally 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 residence requirements. After the award of the master's degree or completion of thirty semester hours of graduate credit, a doctoral student must receive from The Florida State University a minimum of twenty-four semester hours of graduate credit within a twelve calendar-month period. For further detail on requirements for doctoral programs, 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*: Public Health, Economic Policy and Government, Reubin O' D. Askew School of Public Administration and Policy, and Urban and Regional Planning.

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. 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.

Graduate students on assistantships are normally provided with office space to carry out their duties, including meetings with students if they are teaching. The College participates in joint-degree programs with the College of Law, in which students can simultaneously pursue the JD degree and either the MPA, the MSP, the MS in economics, or the MA or MS in international affairs. The Reubin O'D. Askew School of Public Administration and Policy has joint-degree programs with the Department of Urban and Regional Planning, the College of Criminology and Criminal Justice, and the College of Social Work in which the student simultaneously pursues the degrees of MPA and MSP, MPA and MS, MPA and MSW, MS in Demography and MPH in Public Health. The Department of Urban and Regional Planning has joint-degree programs with the College of Law, the Askew School of Public Administration and Policy, the master's program in Demography, the master's program in International Affairs, and the master's program in Public Health. These programs enable the student to complete both degrees in less time than if they were attempted sequentially. To enter a joint-degree program, the student must be formally admitted to both programs.

COLLEGE OF SOCIAL WORK

Dean: Nicholas F. Mazza; **Associate Dean for Academic Affairs:** Dina J. Wilke; **Associate Dean for Research:** Amy Ai

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 we 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 350 undergraduates and 400 graduate students enrolled in the College, with forty 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 The Florida State University's College of Social Work amongst the top Colleges of Social Work programs in the country and the only such 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.

Master of Social Work (MSW) Degree Program

MSW Program Director: B. Craig Stanley, 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 Program 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.

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 July 1, 2008 (replaces 2002 EPAS). For further details, refer to: <http://www.cswe.org/File.aspx?id=14115>.

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's Program Requirements

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. Students are expected to enroll as full-time students each of the four semesters. 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.

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 program is normally completed in three semesters. 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 policy and administration or clinical social work.

Distance Learning Programs

The MSW degree is also offered at off campus locations in Gainesville, Jacksonville, and Panama City as well as online for qualified applicants. Requirements are the same as for the full-time program.

Admission

Admission to the traditional master's program in social work is limited to August of each year, except for transfer and advanced standing students (see below). Application for admission to the program must be completed by May 1st of the year in which admission is planned and must be made both through the graduate student affairs office in the College of Social Work and through graduate admissions at The Florida State University. Applications for advanced standing students are to be completed by October 1st for spring admission and by March 1st for summer.

Minimum academic standards for admission to the MSW program requires: 1) a bachelor's degree (with a liberal arts foundation) from an accredited college or university; and 2) a GPA of at least 3.0 in upper-division courses on the undergraduate level **AND** applicants must submit scores for the Graduate Record Examinations (GRE) General test.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

University requirements for admissions must also be met. A limited number of exceptions to these requirements are available. For further information and application materials, contact the Coordinator of Recruitment and Admission at <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 1st 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: Karen Randolph, 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) a score on the GRE of at least 1050, with a verbal score of at least 500 and a quantitative score of at least 550; and 3) a GPA of at least 3.0 on a four-point scale.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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/index.php?clickLink=phd>.

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 you the ability to focus on specialized areas of interest. With the guidance of faculty and our graduate adviser, you create a program of study, which meets your 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/index.php?clickLink=certificatesCHLD>.

Family Social Work Practice Certificate Program

This certificate program is designed for MSW Clinical Concentration students who wish to develop advanced competence in couple and family social work. Coursework for this certificate focuses on advance practice skills for those students wishing to pursue careers in mental health settings. For more details, visit <http://csw.fsu.edu/index.php?clickLink=certificatesFAM>.

Social Work in Disaster Recovery Certificate Program

This certificate program will educate degree-seeking graduate students and train non-degree seeking professionals for culturally competent practice, advocacy, and long-term recovery case management with diverse populations in natural disaster relief efforts. This SWDR Certificate will equip participants with the knowledge, awareness, and skills necessary to provide culturally sensitive disaster relief services. An in-depth curriculum will be developed that emphasizes cultural awareness, evidence-based knowledge development, skills acquisition, and strategic planning with vulnerable populations in disaster relief and long term recovery efforts. For more details, visit <http://csw.fsu.edu/index.php?clickLink=certificatesDIS>.

The Arts and Community Practice Certificate

The program is an interdisciplinary certificate designed for undergraduate and graduate students who wish to develop a focused concentration on the application of the arts to community development. This is inclusive of groups and families and addresses all stages of human development. Particular attention will be given to prevention, enrichment, and response to social concerns. For more details, visit <http://csw.fsu.edu/index.php?clickLink=certificatesART>.

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/index.php?clickLink=certificatesLEAD>.

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 FSU students in successfully managing social service agencies and affecting policy and practice on all levels.

Joint MSW/JD Program

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 degree must be admitted simultaneously and independently to both FSU’s College of Social Work and College of Law.

Joint MSW/ MBA Program

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 degree 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 Program

Florida State University’s Reuben O’D. Askew School of Public Administration and Policy and the College of Social Work offer a joint degree program leading to the degree of Master’s of Social Work (MSW) and Master’s of Public Administration (MPA). This is one of the few joint degree programs 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 degree is for graduate students in both programs who wish to expand their understanding 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

Field Director: Katrina Boone, 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.

Professional Development

Professional Development Director: Pamela W. Graham, 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 to provide continuing education units (CEUs). CEUs are awarded to all participants who successfully complete any continuing education presentation.

Student Organizations

The **Association of Student Social Workers (ASSW)** 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 **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 – March 1. Awards are for fall semester only, except as noted (see Hurrell and Montgomery Scholarships). Deadline dates and applications are available on the College of Social Work Web site, at <http://csw.fsu.edu/admissions-scholarships.php>.

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.

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.

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 1st. 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 Mr. 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.

COLLEGE OF VISUAL ARTS, THEATRE AND DANCE

Interim Dean: T. Lynn Hogan

The College of Visual Arts, Theatre and Dance was formed in 2005, with the combination of the former School of Visual Arts and Dance and the School of Theatre. The College has three academic units: the School of Art and Design, the School of Dance, and the 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 The 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 Visual Arts, Theatre and Dance 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, 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 The Florida State University campus—to keep the spirit of open inquiry vital and productive.

Regardless of the department of a student's major, the College of Visual Arts, Theatre and Dance 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, 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. 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 design work in specifically designed and dedicated spaces in the newly renovated William Johnston Building located in the center of campus.

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 Association of Museums.

The John and Mable Ringling Museum of Art

Beginning with the new millennium, The Florida State University was charged by the State of Florida with administration of the Ringling Museum of Art in Sarasota, Florida. This incredible museum complex with its superb internationally renowned art collection, Circus Museums, Historic Asolo Theatre, and Ringling mansion, offers multiple opportunities for students in the arts, museum studies, and the humanities. Programs derive from and enhance undergraduate and graduate education in the College of Visual Arts, Theatre, and Dance, as well as many other areas within The Florida State University.

Certificate Program in Museum Studies

The College of Visual Arts, Theatre, and Dance, 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 studies. The program leads to a certificate in museum studies for 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; art education; art history; dance; interior design; theatre; arts administration; anthropology; classics; dance; history; humanities; textiles and consumer sciences; recreation, tourism, and events; as well as information studies; and it will continue to attract disciplines as it expands.

Museum studies 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 countries such as Spain, France, and South Africa. Operated by The 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 Visual Arts, Theatre, and Dance 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.

Athantor

For the past twenty-six years the College has published *Athantor*, 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 program in the College should consult the appropriate *General Bulletin* and the department regarding admission processes and standards.

GRADUATE ACADEMIC DEPARTMENTS AND PROGRAMS

Department of ACCOUNTING

COLLEGE OF BUSINESS

Web Page: <http://cob.fsu.edu/acc/>

Chair: Bud Fennema; **Andersen Professors:** Heflin, Paterson; **Deloitte Professor:** Morton; **Ernst and Young Professor:** Fennema; **KPMG Fellow:** Billings; **Professors:** Heflin, R. Icerman, Morton; **Associate Professors:** Atwood, Bathke, Billings, Fennema, Gerard, J. Icerman, Paterson, Reynolds, Stevens; **Assistant Professors:** Blay, Zhang; **Research Associates:** Pierno, Sudano; **Associate in Accounting:** Greenberg; **Assistant in Accounting:** Jarnagin; **Executive-in-Residence:** 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, industry, government, and non-profit 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 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 the 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 computer 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, governmental reporting, assurance services, and taxation.

Master of Accounting

The master of accounting (MAcc) program provides students with exposure to advanced theories and topics 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. 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 four offerings: assurance services, accounting information systems, corporate accounting, or taxation. Each major requires between five and eight graduate courses in accounting, as well as courses in other business areas, for a total of thirty-three 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 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-business Majors. 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 resume and a personal statement. While there are no absolute

minimum criteria for admission, successful applicants 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.

Requirements

Specific course requirements in the master of accounting program are under continuous review. For current course requirements, contact: *Graduate Office, Room 233 RBB, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110 (gradprog@cob.fsu.edu).*

Master of Accounting Program for Non-business Majors

The Department of Accounting also offers a MAcc program for non-business undergraduate majors. Full-time students should be able to complete the total program in about two years. The first part of the program consists of undergraduate foundation courses. The second part of the program consists of the MAcc coursework described above. Although these courses can be completed as a non-degree seeking student or a second degree-seeking student, students in this program can be admitted to the MAcc program upon meeting the requirements, typically a 3.0 GPA and 550 GMAT score. Students in the program must maintain at least a 3.0 GPA.

Required Undergraduate Foundation Courses

Financial Accounting and Reporting I
Cost Accounting I
Calculus for Business and the Nonphysical Sciences
Quantitative Methods for Business Decisions
Economics of the Price System
Financial Accounting and Reporting II
Cost Accounting II or Federal Tax Accounting II
Accounting Information Systems
Economics of the National Economy
Uniform Commercial Code Business Law Problems
Auditing Theory and Application I
Federal Tax Accounting I
Organizational Behavior
Basic Marketing Concepts
Financial Management of the Firm

Doctor of Philosophy in Business

Major in Accounting

The doctor of philosophy in business with a major in accounting prepares candidates primarily for teaching and research 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 American Accounting Association, and the American Institute of Certified Public Accountants.

Requirements

Graduate-Level Foundation Courses

In addition to the undergraduate prerequisites of calculus I and II, financial management, linear algebra, and statistics, students must have taken a graduate-level finance course.

FIN 5425 Problems in Financial Management (3)

OR

FIN 5515 Investment Management & Analysis (1-4)

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 adviser. 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 application forms and additional information related to graduate accounting programs, contact the *Graduate Office, Room 233 RBB, College of Business, P.O. Box 3061110, Florida State University, Tallahassee, FL, 32306-1110*, or via e-mail at gradprog@cob.fsu.edu.

Definition of Prefixes

ACG—Accounting: General

GEB—General Business

TAX—Taxation

Graduate Courses

Note: The 5000 level courses are reserved exclusively for graduate students. No courses carrying both undergraduate and graduate credit are offered. Courses that may be repeated for credit are designated by “r” immediately following the course number.

ACG 5026. Financial Reporting and Managerial Control (1-4). 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 5135. Financial Accounting Theory and Standard Setting (3). Prerequisite: ACG 4201. 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 5356. Advanced Management Accounting (3). Prerequisite: ACG 3351. A study of current advanced topics in management accounting.

ACG 5405. Advanced Accounting Information Systems (3). Prerequisite: ACG 4401. Design and operation of accounting systems; 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. 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. Theory of auditing and development of audit programs; procedures for obtaining audit evidence; auditor responsibility under Securities and Exchange Commission requirements.

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). Prerequisite or co-requisite: ACG 4642 or ACG 5635. 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 (3) 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 (3) semester hours.

ACG 5915r. 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 (3) hours may apply toward the master's degree. May be repeated to a maximum of five semester hours.

ACG 5935r. Special Topics in Accounting (1-3). Prerequisite: Instructor permission. Content varies to provide opportunity 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.

TAX 5015. Federal Income Tax Accounting II (3). Prerequisite: TAX 4001. Concepts and methods of determining income of corporations, partnerships, estates, and trusts for tax purposes; interpretation of Internal Revenue Code, related regulations, and tax advisory services.

TAX 5065. Research in Federal Taxation (3). Prerequisite: TAX 4001. 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. Develops 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. Develops a comprehensive mastery of concepts, problems, and authorities related to federal estate and gift taxation.

TAX 5875r. Special Topics in Taxation (1-3). Prerequisite: Instructor permission. 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

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. 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. 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. 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. May be repeated to a maximum of twenty-four semester hours.

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*

Program in AMERICAN AND FLORIDA STUDIES

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.fsu.edu/~proghum/>

Director: John Kelsay (Humanities)

Effective as of December 2009, the Program in Interdisciplinary Humanities is suspending admission into the American and Florida Studies major for all new students. However, current students in the major will be allowed to complete their programs of study as outlined in the catalog of the year of admission. For questions and further advising, contact Ms. Shannon Tucker in the Program in Interdisciplinary Humanities at (850) 644-9121.

American and Florida Studies is concerned with the culture of the United States and Florida from cross-disciplinary and interdepartmental perspectives. The aim of the program is toward enlarged dimensions of awareness rather than on further refinements of disciplinary analysis. A wide variety of courses is available from many departments. The flexibility of the program gives students an opportunity to develop a curriculum commensurate with their own interests and needs. For more information on this program, contact the Program in Interdisciplinary Humanities at (850) 644-9121.

College Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Master's Degrees

Students applying for the Master of Arts program in American and Florida Studies should have had an undergraduate major in one of the American studies areas and must satisfy the director that they are qualified for the type of work offered by the program.

Normally a minimum score of 1000 on the combined verbal and quantitative portions of the Graduate Record Examinations (GRE), a minimum cumulative GPA of 3.0, and three letters of recommendation are required for admission.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

The degree candidate must submit an acceptable plan of study which will include either AMS 5809 or AMS 5815.

In almost all cases, the student is expected to write and defend a thesis. A student who elects to write a thesis must complete a minimum of thirty semester hours of coursework at the graduate level including six semester hours of thesis. A student who elects not to write a thesis must complete a minimum of thirty-two semester hours of coursework at the graduate level and a comprehensive examination. All students must successfully complete the foreign language requirement.

Doctoral Degrees

A Doctor of Philosophy (PhD) degree in Humanities with a concentration in American Studies is an option for those students who want to combine their interest in American Studies with graduate training in the teaching of Humanities at the college level. The graduate program in Humanities at the Florida State University cooperates closely with American and Florida Studies in tailoring a course of study to fit the needs of the individual student.

Graduate Certificate Program

All students currently enrolled in a graduate program are eligible to apply for the Graduate Certificate program. Work toward the certificate gives graduate students at both the MA and PhD levels in other disciplines, particularly those in the American Studies core areas, an opportunity through interdisciplinary study to develop a deeper understanding of the pluralistic society they inhabit and to learn new ways to conceptualize social issues, culture, and art throughout American history.

The certificate program in American and Florida studies requires twelve semester hours in at least three disciplines outside the student's department and must include at least one AMS seminar. Ordinarily, students will select courses from a recommended list available from the American and Florida Studies office. The final required project is an article prepared for publication according to the guidelines of a major professional journal. Each student's final program of study must be approved by the director.

Definition of Prefix

AMS—American Studies

Advanced Undergraduate Courses

- AMS 3310. Changing Concepts of the American Character (3).
 AMS 3810. The Life of the Mind in America (3).
 AMS 3932r. Lecture Series in American Problems (3-6). May be repeated to a maximum of six semester hours within the same term.
 AMS 3949r. Cooperative Education Work Experience (0). (S/U grade only.)
 AMS 4935. Senior Seminar (3).

Graduate Courses

- AMS 5809r. Seminar in American Culture (3). May be repeated to a maximum of six semester hours.
 AMS 5815r. Seminar in American Thought (3). May be repeated to a maximum of six semester hours within the same term.
 AMS 5908r. Directed Individual Study (1-3). May be repeated to a maximum of six semester hours.
 AMS 5915r. Supervised Research (1-3). (S/U grade only.) May be repeated to a maximum of five semester hours.
 AMS 5940r. Supervised Teaching (1-3). (S/U grade only.) May be repeated to a maximum of five semester hours.
 AMS 5942r. Internship in an Approved American Studies Field (3-9). (S/U grade only.) Must complete nine semester hours on the graduate level before registering for the internship. May be repeated to a maximum of nine semester hours.
 AMS 5971r. Thesis (1-6). (S/U grade only.) A minimum of six semester hours credit is required.
 AMS 8966r. Master's Comprehensive Examination (0). (P/F grade only.)
 AMS 8976r. Master's Thesis Defense (0). (P/F grade only.)

Department of ANTHROPOLOGY

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.anthro.fsu.edu/>

Due to university budget issues, the degree programs in anthropology are currently suspended. Please see the department Web page for information on pertinent changes. The department still offers a full range of undergraduate courses many of which fulfill broader University curriculum requirements. For students who entered the major prior to Fall 2009, please see the appropriate prior year's bulletins for the Major requirements.

Chair: Glen H. Doran; **Professors:** Doran, Falk; **Associate Professors:** Marrinan, Peters, Schepartz; **Professors Emeriti:** Grindal, Ho, Paredes, Pohl; **Courtesy Professor:** Pullen

The Department of Anthropology offers graduate training in most of the major areas of anthropology. Coursework and research experience are available in New World prehistoric and historic archaeology, Old World prehistory, bioarchaeology, forensic anthropology, paleoanthropology, paleodemography, and zooarchaeology. Geographic areas of study by the faculty include the Southeastern United States, the Caribbean, Mesoamerica, East Asia, Africa, and Europe.

Florida State University, through the Department of Anthropology, has established ties with the **Southeastern Archeological Center (SEAC)**, which is responsible for archaeological research and collections from 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 Paleo-Indian to the 19th century.

Archaeological field schools and field research opportunities are available to graduate students. Through SEAC and the Florida State University Scientific Diving Program, there are opportunities for advanced students to participate in underwater archaeological research.

Training and field experience also are available in biological anthropology, ethnology, and applied anthropology. Programs sponsored by other University departments of interest to anthropology students include the master's program in historical administration (Department of History), the master's program in ethnomusicology (College of Music), the international/intercultural education program (College of Education), Classics, and Art History.

Master's Degree in Anthropology

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

The Department of Anthropology offers the Master of Arts (MA) and Master of Science (MS) degrees. Acceptance into the degree programs is based on a satisfactory Graduate Record Examinations (GRE) score (minimum 1000), an undergraduate grade point average (GPA) of 3.0 or better, the applicant's statement of interest and career objectives, and three letters of recommendation.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

For a thesis-type master's degree, students must complete a minimum of thirty semester hours, of which at least twenty-four hours must be taken on a letter-grade basis. Students must also write and defend a master's thesis. For a non-thesis master's degree, students must complete a minimum of thirty-two semester hours, of which at least twenty-one hours must be taken on a letter-grade basis. Students also must write and defend a pre-doctoral paper in addition to meeting other college requirements. Individual programs are planned by students and their adviser. For additional information, please refer to <http://www.anthro.fsu.edu>.

All candidates for the master's degree in anthropology must meet the same University-wide foreign language requirement as that described specifically for the Master of Arts (MA) degree at Florida State University. Students working toward the Master of Arts (MA) degree also must complete a University-wide humanities requirement. Both requirements are described in the "Graduate Degree Requirements" chapter of this *Graduate Bulletin*. For the Master of Science (MS) degree, the student must also satisfy the foreign language requirement but not the humanities requirement. Special regulations outlining the several programs offered are available from the Department of Anthropology. For additional information, please refer to <http://www.anthro.fsu.edu>.

Doctor of Philosophy (PhD) in Anthropology

Admission Requirements

Acceptance into the doctoral program directly from a bachelor's degree program is based on a satisfactory Graduate Record Examinations (GRE) score (combined score of 1200 on quantitative and verbal), an undergraduate grade point average (GPA) of 3.5 or better, a statement of interest and career objectives, and three letters of recommendation. Students with a master's degree from another institution who meet the University requirements (minimum combined score of 1000 on the quantitative and verbal sections of the GRE and a 3.0 GPA) also are welcome to apply.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Upon admission, the doctoral student's previous coursework and experience will be evaluated by the departmental Graduate Affairs Committee. Recommendations will be made regarding major field area selections, elective coursework and appropriate language proficiency.

Each student will declare a major field within anthropology: socio-cultural anthropology, biological anthropology, or archaeological anthropology.

Course Requirements

Please review all college-wide degree requirements summarized in the "College of Arts and Sciences" chapter of this *Graduate Bulletin*.

Students must complete twenty-four semester hours of graded coursework beyond the master's level and twenty-four dissertation hours for a total of forty-eight semester hours. Undergraduate students who enter the doctoral program directly will complete a course-type master's degree, which does not require a thesis or paper in lieu of thesis, but which requires completion of thirty-two semester hours of coursework, at least twenty-one of which must be taken on a letter-grade basis. Distribution of the twenty-four hours of coursework is as follows: most of the hours will be taken in graded courses within the department, but up to six hours of coursework outside the Department of Anthropology may be applied to the twenty-four hour requirement, subject to the student's committee and the graduate coordinator. No more than six hours of graded Directed Individual Study (DIS) may be taken for credit.

Specific course requirements are as follows:

1. Students will be required to take core courses in the sub-fields of anthropology in their first year. These courses are as follows:
 - ANG 5117** Core Seminar in Archaeology (3)
 - ANG 5493** Core Seminar in Cultural Anthropology (3)
 - ANG 5513** Core Seminar in Physical Anthropology (3)
2. An advanced seminar at the 6000 level in the major field and a course in research methods, unless this has been completed at the Master's level
3. An advanced course in method and theory in each student's major area of study is highly recommended.

Additional Requirements

The doctoral studies committee will evaluate each student's language preparation and make recommendations regarding the appropriate level of language proficiency. Students must demonstrate reading competency of anthropological literature in at least one foreign language. Students will be required to pass the departmental comprehensive examination at the beginning of their third semester in the program. Each student must pass a qualifying examination or complete and defend a pre-doctoral paper before submitting a dissertation prospectus. Each student must have a 3.0 grade point average (GPA) and have satisfied the language requirement before taking the qualifying examinations or defending the pre-doctoral paper. Successful completion of the qualifying examination or defense of the pre-doctoral paper admits the student to candidacy for the doctoral degree.

A dissertation prospectus is due within six weeks of passing the qualifying examination. It is expected that the full dissertation committee will meet for the defense of the prospectus. The dissertation committee is composed of at least three eligible members of the Department of Anthropology faculty and one outside member of the Florida State University graduate faculty.

Dissertation credit hours are anticipated to include fieldwork, data collection and analysis, synthesis, and writing. An oral defense of the dissertation will be held by the dissertation committee and the candidate upon completion of the dissertation. The dissertation must be available to the committee members at least one month before the defense may be scheduled.

Sequenced Course of Study

Students entering the doctoral program with a bachelor's degree will be required to complete the hours required for a master's degree before they begin taking courses at the doctoral level. Full-time PhD students with master's

degree in-hand will be expected to complete the required twenty-four semester hours of coursework during the first three to four semesters. Because of the nature of anthropological fieldwork and its intimate relation to the dissertation, it is expected that the fieldwork and analysis portion of the dissertation hours (the first twelve semester hours) will take up to one and one-half years following the qualifying examination. Dissertation writing (the last twelve semester hours of dissertation credit) should be completed in another six months to one year. This sequence will allow a motivated student to progress through the program in a timely manner. Florida State University requires that the dissertation be completed within five years of admission to candidacy.

Doctoral Degree in Humanities

Florida State University offers an interdepartmental doctoral program in humanities. Some areas of anthropological interest (e.g., historical archaeology, religion, and literature) may be appropriate for this program. Students interested in this program should contact the Director of the Program in Humanities for further information.

Definition of Prefix

ANG—Anthropology Graduate

Graduate Courses

ANG 5091. Seminar in Research Methods (3). This course will acquaint 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 will consider the format for the publication of results. Each of the elements of research design will be considered and a variety of readings will be utilized to understand the basic elements.

ANG 5110. Seminar in Archaeological Method and Theory (3). In-depth exploration of current theoretical and methodological topics in American archaeology. Aim is to develop a critical assessment and understanding of underlying principles and assumptions in the field of archaeology.

ANG 5115. Seminar in Archaeology (3). Seminar topics vary from semester to semester. Past topics have included paleodemography, quantitative methods, research design, and others.

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.

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 5124. Archaeobotany (3). This course is an introduction to the study of humans' use of plants during prehistoric and historic times, focusing on techniques to recover, analyze and interpret plant remains from archaeological sites.

ANG 5129. Wetlands Archaeology (3). This course provides an introduction to wet site archaeology, incorporating an overview of wet sites, their geographic distribution, methods of excavation, conservation requirements, and the field's contribution to our understanding of the past.

ANG 5134. Nautical Archaeology of the Americas (3). Students will study human interaction with bodies of water, particularly in the maritime environment. Illustrated presentations, readings, and discussions will focus on a variety of cultures and watercraft built or used in the Americas.

ANG 5137. Nautical Archaeology: Global View (3). In this course, students will study human interaction with bodies of water, particularly in the maritime environment. Illustrated presentations, readings, and discussions will focus on a variety of cultures and watercraft from Asia, Australia, the Mediterranean and Europe.

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). Critical evaluation of special problems and processes of cultural evolution and adaptation in the southeast.

ANG 5163r. Regional Civilizations in Ancient Mesoamerica (3). Each topic focuses on a regional civilization of Mesoamerica (such as the Maya, Olmec, or Mixtec). Aspects of prehistoric society covered include subsistence systems, trade, social and political organizations, ideology, calendrics and astronomy, language and writing, artifacts, architecture, sculpture and painting. Format is seminar with presentations, research reports, and discussion. May be repeated to a maximum of nine semester hours.

ANG 5172. Historic Archaeology (3). 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 North America and the Caribbean.

ANG 5194r. Analysis and Interpretation of Archaeological Research (3). Principles of analysis and interpretation. Bridges the gap between archaeological field data and activities that produced the data. May be repeated to a maximum of six semester hours.

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 5242. Symbol and Ritual (3). This course is an introduction to symbolic approaches in anthropology and the study of ritual. It critically analyzes conceptual mechanisms that anthropologists use in analyzing symbolic activity. Material comes from various parts of the world.

ANG 5266. Economic Anthropology (3). This course is an introduction to the issues and literature of economic anthropology. This class 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 5309. Conquest of the Americas (3). This course examines the conquest of the Americas. It explores the arts of domination, power and resistance and specific historical encounters where such arts are employed.

ANG 5352. Peoples and Cultures of Africa (3). This course approaches the study of Africa through the reading and discussion of ethnographies of African life. While situating Africa within broad historical dynamics that shaped the continent, the course also focuses on particular economic, gender, medical, political, and ritual circumstances within which people lead their lives. Ultimately, the course explores African ethnography as a key source for current questions and debates within anthropology, African studies, and other disciplines interested in the analysis of human socio-cultural life.

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 5478. Cultural Evolution (3). This course explores ethnographic and archaeological models to understand and explain the various forms of political and economic organizations exhibited by human societies.

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 will present the primary topics. It will include both historic and modern perspectives.

ANG 5580. Biocultural Adaptation and Paleodemography (3). 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. 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 5611. Linguistic Prehistory (3). This course provides an introduction to underlying concepts and methodology of cross-disciplinary studies that use linguistic data in the investigation of prehistory. Selected case studies convey some of the results of such research.

ANG 5641. Ethnopoetics (3). Ethnopoetics uses linguistic patterns to trace the formal structures of texts. Topics addressed in this course include oral poetry, anthropological linguistics, linguistic relativity, ethnopoetic and discourse analyses, speech genres, linguistic transcription and performance, symbolism, ethnomusicology, writing and ethnography.

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; ethnohistory; language acquisition; language policy and bilingual education; and linguistic prehistory.

ANG 5677r. Seminar in Linguistic Anthropology (3). Topics offered will 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 5737. Medical Anthropology (3). This course examines health and healing in a cross-cultural and evolutionary perspective and investigates the biocultural basis of nutrition, reproduction, and health; biomedicine and other healing systems; and the role of anthropology in global public health.

ANG 5801. Field Methods in Cultural Anthropology (3). 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 (1-9). Use of methodology learned in seminars. May be repeated to a maximum of nine semester 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). May be repeated to a maximum of three semester hours within the same term.

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). Internships in collaborating museums and curatorial institutions provide students with a variety of professional work experiences, under the supervision of the student's academic adviser 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.) Six semester hours credit required.

ANG 5976r. Master's Thesis Defense (0). (P/F grade only.)

ANG 6484. Cultural Analysis (3). Cultural analysis describes 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. This 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). 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). 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

Department of ART

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Web Page: <http://art.fsu.edu/>

Chair: Carolyn Henne **Professors:** Blakely, Garcia-Roig, Hanessian, Henne, Lindbloom, Messersmith, Rubini, Stewart, Williams; **Associate Professors:** Mann, Roberson, Rutkovsky; **Assistant Professors:** Baade, Bookwalter, Eby, Mundy, Rushin; **Assistant in Art:** TBA; **Associate in Art:** Stagg; **Professors Emeriti:** Bell, Buggart, Fichter, Hartwell

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, 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 and artistic 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 two large warehouses 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 and 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, printmaking labs and installation rooms. The Facility for Arts Research (FAR) is a research facility in development that provides graduate students with an opportunity to work with visiting artists and researchers on arts projects that investigate the integration of digital technolo-

gies with traditional processes. The Working Method Contemporary gallery in the Arts District of Tallahassee 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, and 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 Seven Days of Opening Nights 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.

Art History

Art history and criticism are an essential part of the MFA program with at least three courses required. A broad range of courses is 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 course in supervised teaching 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*.

The Florence Teaching Award

The Florence Teaching Award is a highly coveted award given to an outstanding graduate student. The award recipient is provided with an opportunity to teach art classes through the Florida State University International Program in Florence, Italy, generally in the spring term following their degree. In addition, the recipient is provided with an adjunct instructor position in the Department of Art the semester prior to the teaching abroad position. This award is jointly supported by International Programs and the Department of Art at Florida State University.

Requirements

Admission

In addition to University admission requirements, the department requires that all applicants submit a portfolio of 20 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 contact the Department of Art for more specific admission information and a copy of 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 thirty-two semester hours in studio art, eleven hours of electives within or outside the department, a minimum of three courses (nine hours) in art history at the graduate level, and a minimum of eight hours toward 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 at <http://art.fsu.edu/pages/programs/graduate/>.

Definition of Prefix

ARE—Art Education

ART—Art

PGY—Photography

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.

ART 5898. Art, Technology, and Critical Theory (3). This course provides an overview of selected contemporary art theory in parallel with an introduction to a range of digital new media art practices.

Graduate Workshops

The workshop system permits the student to select professors based on the students' interests and needs.

ART 5410. Graduate Printmaking (3). This course leads to extensive development of printmaking techniques, concepts, and presentation strategies in support of personal aesthetic development.

ART 5790. Graduate Ceramics (3). This course leads to the extensive development of ceramic techniques, concepts, and presentation strategies in support of personal aesthetic development.

ART 5818r. Graduate Painting and Drawing (3-18). Prerequisite: Must be enrolled in MFA Program. This course is designed to allow for in-depth, directed exploration of the many possibilities of painting. This critique-based course is designed to develop the mature students toward a cohesive portfolio.

ART 5927Cr. Graduate Workshop (1-4). Tutorial. 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.) May be repeated to a maximum of five semester hours.

ART 5955. Digital Portfolio (3). This course offers practical techniques and tools for creating a digital portfolio in support of an artistic practice in any medium.

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 eight semester hours.

PGY 5930. Graduate Photography (3). This course offers a multi-disciplinary discussion forum on current photographic movements and ideas within the world of art, as well as studio experience for the creation of personal artworks.

Department of ART EDUCATION

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Web Page: <http://arted.fsu.edu/>

Chair: David E. Gussak; **Professors:** Anderson, McRorie, Rosal, Villeneuve;

Associate Professor: Gussak, **Assistant Professors:** Broome, Cuyas, Suominen Guyas

The Department of Art Education is the oldest department of its kind in the South. The distinguished faculty in the Department of Art Education is composed of six members, each of whom holds the doctoral degree.

The graduate curricula lead to the Master of Arts (MA) in Arts Administration; the Master of Arts (MA) and Master of Science (MS) in Art Education; Master of Science (MS) in Art Therapy; 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. Deficiencies may be made up 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 (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. Candidates must achieve either 1000 on the combined verbal/quantitative portions of the GRE or 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. An interview is required of students applying for option III.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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 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 combined BA in Art/MS in Art Education program. The primary mission of the five year combined degree 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. This program has not yet been approved by the Department of Education.

Please contact the department for current program status.

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 combined program. 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 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 and interests, and can include studies that lead to a museum education and/or community arts certificate. 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 [3] 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 pre-requisites, 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 provides leadership training for arts agencies, community arts organizations, and visual and performing arts institutions. The degree emphasizes interactions among the visual arts, music, dance, and theatre. Study centers on management and administrative responsibilities and strategies. Course options include the areas of public and private support systems, structures of arts agencies, fundraising, grant writing, personnel management, marketing, education, and programming. 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 interdisciplinary 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 Visual Arts, Theatre and Dance. Applicants need not submit a portfolio.

Certificate Options

The Arts and Community Practice

The certificate program in the arts and community practice is designed for students who wish to develop a focused concentration on the application of the arts to community development. This is inclusive of groups and families, and addresses all stages of human development. Particular attention is given to prevention, enrichment, and response to social concerns.

Students must apply through the program in which they are currently enrolled. Applicants for the certificate program will be accepted from degree-seeking students who are in the MSW or PhD program in social work, MFA program in dance, or MA/MS or PhD program in art education/therapy. Students must have a minimum 3.0 GPA to be accepted into the program.

The program requirements are based on the integration of the theoretical and practical aspects of dance, art education/therapy, and community-based generalist/clinical social work. The requirements include specified coursework in dance, art education/therapy, and social work totaling twelve semester hours with at least three semester hours taken from each program and the

completion of a major paper or project linking theory and practice. The program of studies for the certificate program must be approved by the student's school or departmental representative.

Museum Studies

This is an interdepartmental program leading to a certificate in museum studies for graduate students who wish to supplement their academic knowledge with specific expertise and training in the museum field. Graduates of the program may seek employment in various types of museums and related institutions.

Students must fulfill departmental prerequisites for a graduate degree and complete four museum studies core courses, a six semester hour internship, electives and special requirements as stipulated by participating departments. In addition, students are strongly encouraged to partake in regularly scheduled museum career activities. Students must apply to the museum studies program, College of Visual Arts and Dance.

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 achieving a score of 1000 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.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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 administrating processes in art. 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 speciality
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 de-

gree 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.

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.**

Definition of Prefix

ARE—Art Education

Graduate Courses

Note: Five-year BA in Art/MS in Art Education combined degree courses are currently awaiting curriculum review and do not appear in the following course listing. 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. Curriculum and Programs (3). 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). Prerequisites: Admission to Art Education program. Corequisite: ARE 5046. 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. Art in Community Service (3). Analysis and theory of community arts services: client characteristics, institutional and social contexts, and arts programming.

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. Course is an in-depth investigation of exemplary practices in contemporary museum education. Students will 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. Administration of Art Programs (3). An investigation of leadership, policy making, and planning for art programs at local, state, and national levels.

ARE 5295. Art Museum Education (3). Prerequisite: ARE 5258. Building on a base established in the prerequisite course ARE 5258 Museum Education, this course addresses education in the art museum context.

ARE 5304. Art in Childhood Education (3). 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). Prerequisite: Admission to Art Education program. Corequisite: ARE 5046. 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 5458. Computer Graphics in Art Education (3). Prerequisite: Admission to the Art Education Teacher Certification Program. This course is an introduction to computer functions for pre-service art teachers. The primary emphases are on the development of visual technological literacy through practice and adaptation of computer processes, including the use of graphic software and website design for teaching and learning in art.

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. Emphasis in this course is placed on group processes and the unique characteristics that art brings to group work. Group art therapy is examined from a theoretical perspective. Practical application 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 5555. Advanced Art Therapy (3). A survey of art therapy through examination of its history, literature, populations, and professional opportunities.

ARE 5556. Using Personal Symbols in Therapy (3). Prerequisite: Instructor permission. This course explores the use of visual symbols and metaphors to facilitate communication, problem solving and termination of treatment, and verbal interaction skills. The uniqueness of artistic expression in therapy is examined through experiential and theoretical modes. Implications for practical applications are discussed for various special populations.

ARE 5557. Interpretation of Symbols in Art Therapy (3). Prerequisite: Instructor permission. Through a therapeutic focus, this course expands the study of the interpretation of symbols through the exploration of psychological frameworks, social contexts, and etiological and developmental references. The study of defense mechanisms (or coping styles) and ethical issues related to symbolic art expression through interpretation and practice related to client art is explored. Instructional format is varied with lectures, discussions, case studies, and art experiences illuminating theoretical and practical applications of the significance of art symbols.

ARE 5640. Ethics and Professional Issues (3). Prerequisite: Instructor permission. 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). Critical appraisal of historical, philosophical, and contemporary trends and issues in the arts and art education.

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. Managing the Arts Organization (3). 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). 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. Arts Administration in the Public Sector (3). Arts administration theory based on social context, client services, and comparative studies in the arts: music, visual arts, theatre, dance, literature, and electronic media. Arts support networks and leadership as factors for effective arts administration.

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). Topics in art education, arts administration, and art therapy vary from term to term. May be repeated to a maximum of fifteen semester hours in the same term.

ARE 5934r. Special Topics: Art Therapy Issues (3). Prerequisite: Instructor permission. The content of this course varies 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 six semester hours.

ARE 5935r. Seminar: Current and Comparative Studies in Art Education (3). Exploration of current issues in art education: 1) theory, research, and practice in the field, 2) teaching comprehensive art education. May be repeated to a maximum of fifteen semester hours. May be repeated in the same semester.

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. Practicum experiences in a school, community, or clinical setting comprise the content of this course. 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). The teaching-learning process in art education.

ARE 6905r. Directed Individual Study (1-3). May be repeated to a maximum of six semester hours.

ARE 6937r. Doctoral Seminar (3). Foundations of art education. 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 8985r. Dissertation Defense (0). (P/F grade only.)

ART HISTORY:
see also Asian Studies; Classics

Department of ART HISTORY

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Web Page: <http://www.fsu.edu/~arh/>

Chair: Adam Jolles; **Professors:** Gerson, Neuman, Weingarden; **Associate Professors:** Bearor, Freiberg, Jolles, Leitch; **Assistant Professors:** Carrasco, Jones; **Curator/Associate in:** Hudson; **Professors Emeriti:** Bosch (deceased), Bucher (deceased), Draper, Mason (deceased), Rose, Teilhet-Fisk (deceased); **Courtesy Professors:** Brilliant, de Grummond, McLendon, Nasgaard, Palladino-Craig, Pfaff, Pullen

The Department of Art History offers programs leading to the Master of Arts (MA) 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, 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 fully equipped for multimedia presentations and a visual resource center under the direction of a full-time curator. The resource center houses a collection of over 500,000 slides, videos, and pedagogical CDs, as well as a digital server containing over 45,000 images. Additionally, the **School of Art and Design Library** includes over 5,860 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 are also available.

The **University Museum of Fine Arts** houses several permanent collections and is used for temporary exhibitions. Many of these are generated by faculty and students who have also contributed to exhibitions at the **Mary Brogan Museum of Art and Science**, the former Tallahassee City Museum. 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, 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, in the process of development, hosts faculty and art history classes. 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 **Symposium in the History of Art** 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 Visual Arts, Theatre and Dance. 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

Two types of master's degree are offered, one that requires a written thesis, and the other that provides additional study in the field through coursework. The selection is made in consultation with the graduate adviser and with the advice of professors in the student's major field. Applicants who already hold a MA in art history may apply for admission to the PhD program.

The department also offers the possibility of a straight-through PhD degree. The student may express interest in this degree program, and admission is by invitation of the faculty.

Master of Arts (MA) in the History and Criticism of Art

This degree involves broad exposure to the history of art and is designed to develop research and writing skills that will be useful in a professional career in one of the art historical disciplines. Two MA-degree tracks are offered, one that requires a written thesis, and one that provides further instruction in the field through coursework. A minimum of either thirty-three or thirty-six credit hours are required, depending on the degree track selected. A minimum grade of "B-" is necessary for courses to be counted toward fulfillment of these credits. The requirements are as follows:

- One course from three different areas, for a total of three courses:
 - Ancient and Classical (including Aegean and Egyptian)
 - Medieval (early Christian, Byzantine, Romanesque, and Gothic)
 - Renaissance and Baroque (Southern and Northern European)
 - Modern (19th and 20th centuries, American and European)
 - Visual Cultures of the Americas (Pre-Columbian through present, Western Hemisphere)
 - One course in methods of art history (ARH 5813)
 - One course in a field outside the western tradition (Asian, Islamic, Latin American, African, Oceanic, and Native American art)
 - Three courses in the student's major field
 - One elective chosen from courses inside or outside the department, to be determined in consultation with the graduate adviser
 - Reading proficiency in one foreign language (usually French or German)
- AND**
- Either six semester hours of supervised research for the thesis, or nine semester hours in art history (see below).

Master of Arts: Thesis

Minimum thirty-three semester hours. For students who intend to continue their studies at the doctoral level, and perhaps go on to university teaching, the department recommends the thesis option. The thesis should demonstrate proficiency in research, writing, and argumentation and must be passed by a committee consisting of faculty from the Art History Department. Six semester hours are awarded for thesis work.

Master of Arts: Course Intensive

Minimum thirty-six semester hours. This option is best suited for students who are interested in pursuing careers in the field that do not require the PhD. In this case, the student will complete the requirements as outlined above, but in place of the six semester hours required for the thesis, an additional nine semester hours (three courses) in art history will be necessary.

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 forty-two credit hours: nine hours of required core courses, fifteen hours in Art History, six hours in Museum and Cultural Heritage electives (taken outside the department), and twelve hours of internship, including a 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 twenty-four semester hours of supervised dissertation research (sixty semester hours). A minimum grade of "B-" is necessary for courses to be counted toward fulfillment of the degree requirements.

- One course in methods of art history (ARH 5813) if not already taken at FSU

- Five courses in a major area of study
 - Three courses in a minor area
 - Three electives to be selected in consultation with the student's major professor and the graduate adviser. These might be taken in other areas of art history or in other disciplines (courses must be approved by the graduate adviser and are dependent on the major and minor areas of study)
- In addition to the above coursework, the candidate also must complete the following requirements:
- Twenty-four semester hours of supervised dissertation research
 - Demonstration of reading knowledge in French and German (language requirements for students with a specialization in non-Western art may differ). Depending upon area of specialization, additional languages may be required
 - Satisfactory completion of a doctoral examination concerning material in the major and minor fields
 - Satisfactory defense of a dissertation that makes an original contribution to scholarship

It should be noted that the University requires that doctoral students take twenty-four semester hours of coursework while in residence during one twelve-month period.

Straight-through Program Leading to a Doctor of Philosophy (PhD) in the History and Criticism of Art

This degree provides for students who hold a bachelor's degree in art history (or a sufficient number of courses in the field) the opportunity to move through the Master of Arts and into doctoral level study at an accelerated pace. Those who hold the bachelor's degree and wish to pursue doctoral-level work in the department first should apply for admission to the master's program. Acceptance will be by invitation of the faculty, and will occur between the student's third and fourth semester of master's-level work. After nomination by the major professor, the entire faculty will vote on admittance. Under the requirements of the combined program, the master's thesis will be replaced by a "qualifying paper," which will demonstrate the student's capacity for advanced research, writing, and argumentation. For requirements, see numbers 1-6 under sub-section *Master of Arts (MA) in the History and Criticism of Art* and numbers 2-8 under sub-section *Doctor of Philosophy (PhD) in the History and Criticism of Art* above. In all, this track requires a minimum of sixty semester hours of coursework, plus twenty-four semester hours of supervised dissertation research, that is a total of eighty-four semester hours. A minimum grade of "B-" is necessary for courses to be counted toward fulfillment of the degree requirements.

Certificate in Museum Studies

In addition to their MA or PhD degree, graduate students in art history may earn a Certificate in Museum Studies. The museum studies program is interdisciplinary and prepares students for professional work in museums and related institutions. After fulfilling the requirements for the graduate degree, students complete two core courses, two electives, and an internship of six credit hours, which requires a certificate project. Students are strongly encouraged to participate in regularly scheduled museum career activities.

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). The 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). A detailed study of the major archeological evidence related to the Bronze Age in Crete and Greece; the major sites, monuments, and artistic works studied and analyzed.

ARH 5119. Archaeology in Ancient Egypt (3). A survey of the archaeology and art of ancient Egypt from the Pre-dynastic to 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). 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 B.C. (3). 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). The archaeological evidence and artistic production of Rome from Augustus through the Antonines studied carefully with a view toward evaluating the period's accomplishments.

ARH 5174r. Studies in Classical Art and Archaeology (3). Specific studies in aspects of classical art and archaeology.

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). 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). The 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). 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 will center 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). 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). 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 Vela'zquez.

ARH 5361. Northern Baroque Art (3). 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). 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). 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). 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). 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). 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). 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 US art relevant to the period covered and the critical issues driving the field. Theme for the seminar varies.

ARH 5648. Art after 1940 (3). Course covers American and European art from Abstract Expressionism to the present. This 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). The 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). A survey of artists and processes in western print-making from woodcut to silk screen.

ARH 5797. Seminar in Museum Studies (3). 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). May be repeated to a maximum of nine semester hours within the same term.

ARH 5813. Seminar in the Methods of Art History (3). 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. 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. The 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 US 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 nine 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). 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). 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). 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). Advanced seminar on specific topic 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). 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). 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 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 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 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

Program in ASIAN STUDIES

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://www.coss.fsu.edu/asian/>

Director: Lee Metcalf (Social Science)

Asian Studies is an interdepartmental program leading to the Master of Arts degree (MA). 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, history, anthropology, 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 Blackboard Organization site. All internships must be approved by the program director the semester before the internship takes place.

Requirements

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) prior to admission to 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 may choose either a thirty-three semester hour coursework program or a thirty semester hour course and thesis program. Students selecting the first option will undergo comprehensive examinations on the coursework taken for the degree during their last semester in the program. 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 theses, 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.

Students may select courses broadly from the listing of coursework below, so long as they take a minimum of eight 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. Up to eight semester hours in the thirty-three semester hour program or six in the thirty semester hour program may be 4000-level courses, if no 5000-level equivalent is offered by that department or school.

Language. All students must satisfy the foreign language requirement for the MA degree by demonstrating a reading proficiency in Chinese, Japanese, Arabic, or some other approved Asian language through either: 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 the Florida State University. Students, however, are encouraged to go much farther in their language training to gain an ef-

fective competency in their chosen area language. Up to nine semester hours of language study beyond the initial twelve semester hours can be counted toward the degree requirements when taken under the appropriate 4000- and 5000-level course numberings.

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 Blackboard Organization site as well as the program office in 211 Bellamy.

Asian History

Minimum of eight semester hours

- ASH 5226 Modern Middle East (4)
 ASH 5266 Central Asia Since the Mongols (4)
 ASH 5529 Traditional India (4)
 ASH 5559 Modern India (4)

Social Science Track

Minimum of six semester hours

- CPO 5091 Core Seminar in Comparative Government and Politics (3)
 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 5705 International Trade (3)*
 ECO 5715 International Finance (3)*
 ECO 5936r Special Topics [The Chinese Economy] (1–3)
 ECS 5005 Seminar in Comparative Economic Systems (3)
 ECS 5015 Economic Development: Theory and Problems (3)
 ECS 5335 Economies in Transition (3)
 GEA 5195r Advanced Area Studies (3)
 GEO 5358 Environmental Conflict and Economic Development (3)
 GEO 5425 Cultural Geography (3)
 GEO 5465 Historical Geography (3)
 GEO 5472 Political Geography (3)
 INR 5014 Contexts and International Relations (3)
 INR 5036 International Political Economy (3)
 INR 5088 International Conflict (3)
 INR 5137 Politics of Terror (3)
 INR 5934r Selected Topics (3)
 INR 5938 Joint Seminar in International Affairs (3)
 SYA 6938r Selected Topics in Social Institutions, Social Organizations and Social Policy [Japanese Society] (3)
 SYP 5105 Theories of Social Psychology (3)
 SYP 5305 Collective Behavior and Social Movements (3)

* Consult with instructor and/or see course description about required prerequisites

Arts and Humanities Track

Minimum of six semester hours

- ANG 5491 Seminar in Social Anthropology [Peoples and Cultures of Southeast Asia] (3)
 ANG 5491 Seminar in Social Anthropology [Chinese Society and Culture] (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)
 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)
 REL 5035 Seminar: Introduction to the Study of Religion (3)
 REL 5195r Seminar: Religion and Culture (3)
 REL 5292 Tutorial in Near Eastern Languages and Literature (3)
 REL 5305r Seminar: History of Religions (3)
 REL 5319 Tutorial in Classical Chinese Religious Texts (3)
 REL 5326 Religions of the Ancient Near East (3)

- REL 5332 Modern Hinduism (3)
 REL 5354r Special Topics in Asian Religions (3)
 REL 5356 Readings in Tibetan Religious Texts (3)
 REL 5910r Tutorial in Pali (1–3)
 REL 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

ASN—Asian Studies

Graduate Courses

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

Department of BIOLOGICAL SCIENCE

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.bio.fsu.edu/>

Interim Chair: Thomas M. Roberts; **Associate Chair (Graduate Studies):** Bates; **Associate Chair (Undergraduate Studies):** L. Keller; **Associate Chair (Curriculum Development):** Epstein; **Professors:** Abele, Bates, Chase, Ellington, Erickson, D. Fadool, Fajer, Gaffney, Gilbert, Houle, Houpt, Levitan, Meredith, Miller, Roux, Taylor, Travis, Tschinkel; **Associate Professors:** Bass, Epstein, Deng, J. Fadool, Hughes, Inouye, L. Keller, T. Keller, Mast, Steppan, Tang, Trombley, Underwood, Winn, Wulff, Zhu; **Assistant Professors:** Chadwick, Cui, Dennis, DuVal, Jones, Lee, Lemmon, Lenhart, Lyons, McGinnis, Rokyta, Stroupe, Yu; **Professors Emeriti:** Anderson, Caspar, DeBusk, deKloet, Elam, Freeman, Heard, Hermkind, Hofer, Homann, James, Livingston, Mariscal, Outlaw, Quadagno, Reeves, Roeder

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 or as researchers in industry or government laboratories.

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. Special research programs are available in biophysics and molecular biology; cell biology; biochemical and molecular genetics; ecology; evolution; developmental biology; microbiology; virology; immunology; plant and animal physiology; comparative physiology; reproductive physiology, endocrinology, and neuroendocrinology; sensory physiology; population biology/genetics; marine biology; plant and animal systematics; tropical biology; conservation biology. In addition, many of the departmental programs are associated with research and graduate programs of the departments of Oceanography, Chemistry and Biochemistry, and Psychology, as well as with specific advanced-study programs of the Molecular Biophysics Program. The Program in Neuroscience provides interdisciplinary training in the use of biological and behavioral methods in the study of the nervous system function.

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 quarters, 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-seven faculty members. The current faculty members hold contracts and grants totaling millions of dollars. Faculty members are represented on the editorial boards of numerous professional journals and hold a number of national offices in professional societies. Three 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, and 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 on-line to the Office of Admissions at <https://admissions.fsu.edu/gradapp/>. The Biological Science application deadline and submission of all supporting documents is December 15 for the Fall semester. All applicants will meet the minimum criteria of a 3.0 undergraduate grade point average (GPA) for the last two years; GRE scores [the average entering graduate student has a verbal GRE score of 550 (156 on the new GRE, 72%) and a quantitative score of 690 (154 on the new GRE, 67%)]. We do not have a minimum GRE score for admission, but applicants with GRE scores below 500 (153) verbal and 550 (146) quantitative need to have strong research backgrounds, a GPA > 3.2 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 encouraged to contact individual faculty about the details of their research activities.

Financial Aid

Graduate assistantships (teaching, research, and/or service) are available at approximately \$20,000-\$21,000 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*.

Master's Degree

The master's degree requirements should be met in two to three years. The Master of Science (MS) degree requirements include the following:

1. At least thirty semester hours of graduate credit (5000 level and above courses and those 4000 level courses recommended by the student's committee, 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

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

For additional information, see <http://www.bio.fsu.edu/index-grad.htm>.

Interdisciplinary Program in Neuroscience

Director: Richard L. Hyson

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 adviser/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, 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, 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://www.neuro.fsu.edu>.

Definition of Prefixes

BCH—Biochemistry (Biophysics)

BOT—Botany

BSC—Biological Science

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 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 5409. **Biophysical Principles of Biological Techniques (3).** This course analyzes physical principles behind modern laboratory methods used in biological research.

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.) May be repeated to a maximum of fifty semester hours.

BSC 5932r. **Graduate Tutorial in Biological Science (1).** (S/U grade only.) Prerequisite: Graduate standing. Selected topics in contemporary biological science; reading and analysis of primary literature. May be repeated to a total 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.) Required of all graduate students throughout their residence.

BSC 6980r. **Dissertation (1–12).** (S/U grade only.) Prerequisite: BSC 8964r passed. Must register for dissertation research hours while working on dissertation. 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.) 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.) 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).** Structure and replication of the bacteriophage, plant and animal viruses, with an emphasis on comparative molecular biology and infectious disease.

MCB 5936r. **Selected Topics in Microbiology (1–4).** May be repeated to a maximum of sixteen semester hours.

Process Biology

PCB 5137. **Advanced Cell Biology (3).** Principles of cell organization; membrane structure and transport; cyto skeleton; signaling; organelle structure and function; energy metabolism; cellular aspects of cancer and immunity.

PCB 5425. **Population Ecology (3).** 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. Introduction to community concepts; species richness models; matrices and communities; competition and species packing; predation and dominance.

PCB 5525. **Molecular Biology (3).** Prerequisites: PCB 3063 or equivalent or instructor permission. Introduction to molecular biology and molecular genetics. The emphasis will be 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. Gene regulation and its relationship to differentiation and development.

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. Topics in this course include 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 5785. **Biology of Muscle (3).** Prerequisites: BCH 4053 and PCB 3743. Muscle biophysics, biochemistry, and physiology; an emphasis on contractile function, experimental methods, and specialization of muscular systems in vertebrates and invertebrates.

PCB 5795. **Sensory Physiology (3).** Prerequisite: General physiology/cell biology background. Mechanisms of sensory transduction; higher level processing of sensory information; comparative aspects of sensory physiology.

PCB 5845. **Cell and Molecular Neuroscience (4).** In this course, students are introduced 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 5937r. Selected Topics in Physiology (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 5347. Neuropharmacology (3). Prerequisite: PCB 5845. 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.) 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.) 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 will provide a research-oriented seminar for graduate students in neuroscience. Content will include 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.

ZOO 6933r. Seminar in Marine Biology (2). (S/U grade only.) May be repeated to a maximum of eight semester hours.

ZOO 6934r. Seminar in Zoology (2). (S/U grade only.) May be repeated to a maximum of eight semester hours.

BIOMEDICAL MATHEMATICS:
see Mathematics

BOTANY:
see Biological Science

CELL BIOLOGY:
see Biological Science

Department of BIOMEDICAL SCIENCES

COLLEGE OF MEDICINE

Web Page: <http://med.fsu.edu/?page=biomedicalSciences.home>

Chair: Richard S. Nowakowski; **Professors:** Blaber, Diaz, Galasko, Hurt, Johnson, Levenson, Nowakowski, Ouimet, Overton; **Associate Professors:** Arbeitman, Blackmon, Horabin, Kabbaj, Kato, Laywell, Leadem, Lee, Megraw, Olcese, Stefanovic, Wang, Zhou; **Assistant Professors:** Cappendijk, Gunjan, Kumar, Paik, VanLandingham, Zhu; **Assistant Scholar Scientist:** Bienkiewicz; **Eminent Scholar:** Bhide

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. Three broad areas of research are emphasized: development, neuroscience and the molecular basis of human disease. 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.

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.

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) 644-6420 or visit the program's Web site (<http://med.fsu.edu/?page=phdAdmissions.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) have a minimum combined verbal and quantitative score of 1000 or above on the Graduate Record Examinations (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 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/>.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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 disease.

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. 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. 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; teaching at least two semesters; 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 <http://med.fsu.edu/?page=phdAdmissions>. *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.*

Definition of Prefixes

- BMS**—Basic Medical Sciences
GMS—Graduate Medical Sciences
IHS—Interdisciplinary Health Sciences
MEL—Medical Science Electives

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 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 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 5862. Multicultural Health Care and Health Disparities (3). This course reviews the impact of culture and ethnicity on health, illness, and health care practices. The course exposes students interested in a career in health care to the challenges of providing care to a multicultural society through exposure to theory, evidence-based practices, and self-exploration through service learning with an underserved population.

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 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 in the same term.

BMS 6936r. Seminar in Biomedical Sciences (1-2). (S/U grade only.) A seminar series in current topics in biomedical sciences. May be repeated to a maximum of sixteen semester hours.

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 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 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.

GMS 6001r. Special Topics in Biomedical Sciences (1-3). (S/U grade only.) An expert, lecture-based course with focus 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). Laboratory course 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.

IHS 5503r. Proposal Development (1). (S/U grade only.) 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.) 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.) 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.) 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.) Oral defense of dissertation research. One-time registration during the term in which the student expects to defend their PhD dissertation.

Department of CHEMICAL AND BIOMEDICAL ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Web Page: <http://www.eng.fsu.edu/cbe>

Chair: Bruce R. Locke; **Professors:** Alamo, Collier, Locke, Ma, Schreiber, Siegrist; **Associate Professors:** Chella, Kalu, Ramakrishnan, Telotte; **Assistant Professors:** Grant, Guan, Kostov, Li, Paravastu; **Research Associate:** Finney; **Visiting Assistant Scholar/Scientist:** Park; **Affiliate Faculty:** C.-J. Chen, Sachdeva, Shanbhag, Wesson

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 (EAC) of the Accreditation Board for Engineering and Technology, Inc. (ABET). 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 that can handle the challenging applications in modern industry and society.

Major research areas include:

- Cellular and Tissue Engineering
- Advanced Polymeric Materials Characterization and Rheology
- Magnetic Resonance Imaging of Cells, Tissues, and Organisms
- Plasma Reaction Engineering for Pollution Control and Disinfection
- Biomass Conversion to Energy by Enzymatic/Catalytic/Thermal/Plasma Methods
- Advanced Computational Methods in Materials, Catalysis, and Transport
- Solid State Materials Synthesis and Characterization

Many of these efforts are conducted in close cooperation with the Florida State University Institute of Molecular Biophysics (IMB), Department of Scientific Computing, National High Magnetic Field Laboratory (NHMFL), and the Departments of Physics, Chemistry and Biochemistry, and Biological Sciences; the Florida A&M University School of Pharmacy and Pharmaceutical Sciences; as well as with the Departments of Mechanical, Industrial, 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, Florida, 32310-6046; phone: (850) 410-6149 or 410-6151; fax: (850) 410-6150; e-mail: cheme@eng.fsu.edu; or Web site: <http://www.eng.fsu.edu/cbe>.

Research Facilities

The Department of Chemical and Biomedical Engineering has extensive graduate research laboratory facilities located in the present College of Engineering building. Three undergraduate teaching laboratories, a design classroom, and twelve graduate research laboratories comprise the current physical resources. All laboratories are well equipped with modern experimental apparatus including numerous workstations and microcomputers for data acquisition and analysis. These facilities include laboratories dedicated to polymer science and engineering, electrochemical engineering, gas/liquid phase pollution treatment by non-thermal plasma, nuclear magnetic resonance, and biomedical engineering.

Research Facilities include: a 500-MHz (11.75-T) NMR spectrometer; a 4.7 Telsa imaging magnet; an atomic-force microscope; extensive cell/tissue growth facilities; rheological apparatus; pulsed and DC power supplies; analytical instruments (GC, GC/MS, HPLC, spectrophotometers, TOC); and analytical microscopes. Process equipment including various types of gas and liquid phase chemical reactors, controlled temperature fermentors, 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 Department of Scientific Computing high level computing facilities, with 1) an aggregate of 800 interconnected CPUs, and 2) the HPC system, with 128 computer nodes (512 CPUs) and 4 head nodes (2.5 TFLOPS of throughput). Faculty are also closely affiliated with the world-class National High Magnetic Field Laboratory (<http://www.magnet.fsu.edu>) and make extensive use of NHMFL resources and instrumentation.

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), 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 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 if they do not have a degree from an accredited chemical engineering degree program;
3. U.S. students: an undergraduate GPA of 3.0 or higher, and a minimum combined score of 1200 on the verbal and quantitative portions of the GRE;
4. International students: an undergraduate GPA of 3.0 or higher, a minimum combined score of 1200 on the verbal and quantitative portions of the GRE exam. In addition, students whose native language is not English are required to take the TOEFL exam and get a score of at least 213 (computer-based) or 80 (Internet-based);
5. Three letters of recommendation from persons familiar with the student's work and background, and a statement of professional goals.

Note: All students must present GRE scores prior to being admitted. Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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. 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. 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 (3)
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 mathematics, chemistry, physics, and general engineering may also be required. Departmental financial support may not be available for graduate students taking undergraduate courses.

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. All graduate students are required to attend the Program for Instructional Excellence (PIE) Workshop to prepare for teaching assistant (TA) duties. This requirement is mandatory regardless of the student's classification as a teaching assistant or research assistant. In addition, all students are

required to take required safety training courses. Each semester, all graduate students are required to enroll in and attend **ECH 5935r**: Chemical Engineering Seminar (0) (S/U grade only).

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 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 5934r	Special Topics in Chemical Engineering (3)

Other elective courses may be found in the University *Graduate Bulletin*.

Thesis Hours (nine semester hours)

ECH 5971r	Thesis (1-12) (S/U grade only)
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In addition to the thirty semester hours of coursework and thesis, an oral examination in defense of the thesis is required for the MS in the chemical engineering thesis option.

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 5934r	Special Topics in Chemical Engineering (3)

Other elective courses may be found in the University *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 (minimum GPA of 3.0);

3. Demonstrated proficiency in conducting research in chemical engineering by passing the departmental PhD qualifying examination (see PhD qualifying examination requirements below for more details).

Before students can be admitted to the ChE doctoral program (or, if already in the graduate program, before they can continue work toward a doctoral degree), they must satisfy the Department's core course requirements for the master's degree, and they must pass the written PhD qualifying examination. 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 master's degree.

Students with a thesis-type master's degree in ChE 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 semester hour requirement for the PhD. All other requirements must be fulfilled as stated above.

Students with master's degrees in ChE or an equivalent discipline from other institutions will be given a specific course plan by the departmental graduate committee. A maximum of thirty semester hours may be assigned to remedy any deficiencies in the student's background.

Degree Requirements

All graduate students are required to attend the Program for Instructional Excellence (PIE) Workshop to prepare for teaching assistant (TA) duties. This requirement is mandatory regardless of the student's classification as a teaching assistant or research assistant. In addition, all students are required to take required safety training courses. Each semester, all graduate students are required to enroll in and attend **ECH 5935r**: Chemical Engineering Seminar (0) (S/U grade only).

Fifty-seven semester hours are required for the PhD degree in Chemical Engineering, as follows:

- Twelve semester hours of chemical engineering core courses (see master's degree course requirements, above);
- Twenty-one semester hours of approved electives (see master's degree course requirements, above);
- Twenty-four semester hours of **ECH 6980r**: Dissertation (1-24) (S/U grade only);
- Successful passage of **ECH 8985**: Dissertation Defense (0) (P/F grade only);
- 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.

The PhD degree will be awarded to a doctoral candidate upon successful completion of the following requirements:

- Passage of the ChE PhD 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;
- Selection of a research topic and major professor(s);
- Formation of a supervisory committee in consultation with the major professor(s);
- 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;
- Completion of a minimum of thirty semester hours of advanced coursework (including twelve semester hours of core coursework);
- Satisfaction of the University residency requirement;
- Completion of at least twenty-four semester hours of dissertation research, **ECH 6980r**: Dissertation (1-24) (S/U grade only);
- Presentation and defense of an original dissertation, **ECH 8985**: Dissertation Defense (0) (P/F grade only);
- At least one semester teaching assistantship in an undergraduate laboratory;
- Presentation of a research topic at one local, regional, national, or international professional meeting;
- Submission or publication of at least one scholarly article based on original dissertation research in peer-reviewed journals.

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 U.S. Currently, biomedical engineering is the most rapidly growing graduate engineering discipline in the U.S. 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 bioengineering, biotechnology, and related professions.

The graduate program in biomedical engineering (BME) provides special emphasis in cellular and tissue engineering, and 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 educational 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

- A baccalaureate degree in engineering, chemistry, physics, or biological sciences, or an allied field from an accredited college or university;
- Fulfillment of the requirements for the baccalaureate biomedical engineering degree or its equivalent. Students may be required to satisfy deficiencies by taking undergraduate courses if they do not have a degree from an accredited biomedical engineering degree program;
- U.S. students: an undergraduate GPA of 3.0 or higher, and a minimum combined score of 1200 on the verbal and quantitative portions of the GRE;
- International students: an undergraduate GPA of 3.0 or higher and a minimum combined score of 1200 on the verbal and quantitative portions of the GRE. In addition, students whose native language is not English are required to take the TOEFL exam and get a score of at least 213 (computer-based) or 80 (internet-based);
- Three letters of recommendation from persons familiar with the student's work and background, and a statement of professional goals.

Note: All students must present GRE scores prior to being admitted. Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Students with a BS degree in engineering, chemistry, physics, or biological sciences are required to take (or have taken) the following undergraduate engineering courses or their equivalents. 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. 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 (3)
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 and II, and Biochemistry I and II (if not included in their degree program). Acceptance of equivalent courses is evaluated on a case-by-case basis, following petition to Graduate committee. Departmental financial support may not be available for graduate students taking undergraduate courses.

Degree Requirements

The Department of Chemical and Biomedical Engineering offers both thesis-type and course-type (non-thesis) options leading to the MS degree. All graduate students are required to attend the Program for Instructional Excellence (PIE) Workshop to prepare for teaching assistant (TA) duties. This requirement is mandatory regardless of the student's classification as a teaching assistant or research assistant. In addition, all students are required to take required safety training courses. 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).

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 **BME 5971r**: Thesis (1-9) (S/U grade only);
4. Oral defense of the Master's thesis, **BME 8976**: Thesis Defense (0) (P/F grade only);
5. 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)
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 5746**: Mammalian Physiology I; **PCB 5747**: Mammalian Physiology II; **PCB 5795**: Sensory Physiology; **PCB 5835**: Neurophysiology; 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 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 the University 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 is required for the MS in the chemical engineering thesis option.

- BME 8976** Thesis Defense (0) (P/F grade only)

II. Course (non-thesis) Option (thirty-three 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. Twenty-one semester hours of approved electives;
3. 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 5746**: Mammalian Physiology I; **PCB 5747**: Mammalian Physiology II; **PCB 5796**: Sensory Physiology; **PCB 5835**: Neurophysiology; 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 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 the University 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 (minimum GPA of 3.3);
3. Demonstrated proficiency in the core areas of biomedical engineering by passing all sections of the departmental PhD qualifying examination.

Before students can be admitted to the BME doctoral program (or, if already in the graduate program, before they can continue working toward a doctoral degree), they must satisfy the Department's core course requirements for the master's degree, and they must pass the written PhD qualifying examination. 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 master's degree.

Students with a thesis-type master's degree in BME 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 semester hour requirement for the PhD. All other requirements must be fulfilled as stated above.

Students with master's degrees in BME or an equivalent discipline from other institutions will be given a specific course plan by the departmental graduate committee. A maximum of thirty semester hours may be assigned to remedy any deficiencies in the student's background.

Degree Requirements

All graduate students are required to attend the Program for Instructional Excellence (PIE) Workshop to prepare for teaching assistant (TA) duties. This requirement is mandatory regardless of the student's classification as a teaching assistant or research assistant. In addition, all students are required to take required safety training courses. 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).

Fifty-seven semester hours are required for the PhD degree in Biomedical Engineering, as follows:

1. Twelve semester hours of biomedical engineering core courses (see master's degree course requirements, above);
2. Twenty-one semester hours of approved electives (see master's degree course requirements, above);
3. Twenty-four semester hours of **BME 6980r**: Dissertation (1-9) (S/U grade only);
4. Successful passage of **BME 8985**: Dissertation Defense (0) (P/F grade only);
5. 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.

The PhD degree will be awarded to a doctoral candidate upon successful completion of the following requirements:

1. Passage of the ChE PhD 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. Selection of a research topic and major professor(s);
3. Formation of a supervisory committee in consultation with the major professor(s);
4. 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;
5. Completion of a minimum of thirty semester hours of advanced coursework (including twelve semester hours of core coursework);
6. Satisfaction of the University residency requirement;
7. Completion of at least twenty-four semester hours of dissertation research, **ECH 6980r**: Dissertation (1-24) (S/U grade only);
8. Presentation and defense of an original dissertation, **ECH 8985**: Dissertation Defense (0) (P/F grade only);
9. At least one semester teaching assistantship in an undergraduate laboratory;
10. Presentation of a research topic at one local, regional, national, or international professional meeting;

11. Submission or publication of at least one scholarly article based on original dissertation research in peer-reviewed journals.

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.

Selection of Major Professor

All full-time graduate students following the thesis option 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. 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 supervisory committee should be established and a program of study prepared in consultation with the major professor before the end of the second term.

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 a 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. 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 semester. 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.

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 (roughly three semesters following the PhD qualifying examination), students are expected to present a PhD 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 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 defense, 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 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 and www.eng.fsu.edu/cbe/graduate.

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 report on research progress, goals, and completed courses at the end of the Spring term for evaluation by the graduate and supervisory committees. A form for this purpose is included in the appendix of the graduate handbook. An assessment of the progress of the student in research and courses by the graduate committee will be placed in the student's permanent file. Continuance of assistantships and/or tuition waivers is contingent upon satisfactory evaluations. 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.

Time to Degree Completion

Students with undergraduate degrees in chemical or biomedical engineering normally complete the thesis-type master's program in four or 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.

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 generally do not require the performance of any work beyond the research requirements of the degree. However, research assistants who receive departmental support for tuition waivers may be required to TA for lecture courses. In addition, doctoral candidates will have to satisfy the teaching requirements of the degree (TA for one laboratory course). Teaching assistantship 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 5620. Biophysical Chemistry and Biothermodynamics (3). Prerequisites: CHM 4410, CHM 4411, and ECH 3101. This course examines engineering thermodynamics and physical chemistry of living systems, as well as biochemical pH monitoring and analysis.

BME 5905r. Directed Individual Study (1–3). Prerequisite: Instructor permission. 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.

BME 5910. Supervised Research (3). (S/U grade only.) Prerequisites: Graduate standing in Biomedical Engineering and instructor permission. 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. 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. 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. Thesis (1–9). (S/U grade only.) Prerequisite: Graduate standing in Biomedical Engineering. Performance of research and preparation of the master's thesis. May be repeated as often as approved by the department. Only six semester hours can be counted toward the degree requirements. A minimum of six hours is required. May be repeated to a maximum of twelve semester hours.

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 6938r. Special Topics in Biomedical Engineering (3). Prerequisites: Doctoral candidate status in Biomedical Engineering and instructor permission. Detailed study of some topic of special interest to biomedical engineers. May be repeated with different topics to a maximum of six semester hours.

BME 6980r. Dissertation (1–9). Prerequisite: Doctoral candidate status in Biomedical Engineering. 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). 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. 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. 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. 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. 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). Corequisites: ECH 5126 and ECH 5526. 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. Advanced mathematical techniques for chemical engineering applications presented 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. Presentation of the central concepts of practical numerical analysis techniques and their application to chemical engineering problems. 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. 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. Performance of research project required for the nonthesis MS degree.

ECH 5934r. Special Topics in Chemical Engineering (3). Prerequisite: Instructor permission. 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.) Presentations by faculty, students, and visiting scientists. Full-time graduate students must enroll each term.

ECH 5971r. Thesis (1–12). (S/U grade only.) Performance of research and preparation of master's. May be repeated as often as approved by the department. Only six hours can be counted toward degree requirements. A minimum of six semester hours is required.

ECH 6272. Molecular Transport Phenomena (3). Prerequisite: Graduate standing. This course covers 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: Doctoral candidate status. 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.

Program in CHEMICAL PHYSICS

COLLEGE OF ARTS AND SCIENCES

Web Page: http://www.chem.fsu.edu/programs.php?menu_id=1

Chair: S.A. Safron; **Professors:** Brüscheweiler, Dalal, Manousakis, Marshall, Rikvold, Safron, Steinbock, Van Winkle, von Molnar; **Associate Professors:** Alabugin, Cao, Hilinski, Lind; **Assistant Professors:** Knappenberger, Nymeyer, Xiong

The departments of Chemistry and Biochemistry and Physics offer interdepartmental Doctor of Philosophy (PhD) and Master of Science (MS) degrees through the Program in Chemical Physics. The program gives students a broad fundamental background for the study of the structure and behavior of matter. It also affords them the opportunity to work with a professor whose field is closest to their own interests, regardless of departmental affiliation. The co-operating faculty consists of members from both departments. The program is designed to serve students trained in mathematics and engineering as well as in chemistry and physics.

Chemical physics programs have typically focused on individual molecules or small molecular systems for theoretical development and experimentation, and many of the chemical physics faculty are engaged in just such work. A number of powerful approaches are being developed. Of these approaches, computational methods have been among the most important. The **Department of Scientific Computing** has as part of its mission the development of computational methods which will be applicable to problems in a wide variety of areas. Some members of the chemical physics program are associated with this department; their research interests generally involve developing computational techniques which are particularly useful in chemical physics and in carrying out some of these calculations.

A number of faculty in the program are also associated with the **Center for Materials Research and Technology** or **MARTECH**. These researchers are interested in mobilizing the powerful array of theoretical and experimental techniques developed for traditional chemical physics problems to attack the more complicated and less well-developed field of material science. For experimental workers, many analytical tools, such as X-ray diffraction, Scanning Electron Microscopy, Electron Spectroscopy for Chemical Analysis (ESCA), Low Energy Electron Diffraction (LEED), Auger Spectroscopy, Ellipsometry, Fourier Transform Infrared Spectroscopy (FTIR), and more, are available to the research community. For those interested in calculations, some faculty are associated with the **Department of Scientific Computing**. Additional research facilities have also become available at the National High Magnetic Field Laboratory.

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 with acceptable chemistry or physics undergraduate degrees and Graduate Record Examinations (GRE) scores can be admitted into the program after having been accepted by either the chemistry or physics departments. Alternatively, students with an appropriate undergraduate record and acceptable GRE scores can enter directly into the chemical physics program. Depending on how they enter the program, new students should prepare themselves for one of three qualifying examinations: physics, chemistry, or chemical physics.

In the case of the departmental qualifying procedure (diagnostic examinations, followed by evaluation of coursework performance in chemistry and proficiency examination in physics), the usual departmental rules shall apply. The rules governing the chemical physics qualifying examination will be consistent with those of the departments of Chemistry and Biochemistry and Physics. This examination will include material from: 1) two semesters of physical chemistry at the level of CHM 4410–4411, and 4410L–4411L and 2) upper-division courses in mechanics, electricity and magnetism, and optics.

Master's Degree

Only a thesis-type Master of Science (MS) degree is offered. The candidate must earn at least sixteen semester hours of credit at the 5000 level or above and, of these sixteen, at least six must be in formal lecture courses in either physics or chemistry. A minimum of six semester hours of thesis credit is required. The candidate must also achieve an appropriate performance on the qualifying examination. Students must take an oral examination that will include a defense of the thesis. A satisfactory thesis may be required by the

faculty as a prerequisite to candidacy for the doctoral degree in particular cases, but neither the thesis nor the master's degree is a general prerequisite for the Doctor of Philosophy (PhD) degree.

Doctoral Degree

1. The preliminary examination for the Doctor of Philosophy (PhD) degree program consists of both written and oral sections. The student can satisfy the written part by following one of two options:

Option A. The student may take and pass six out of the 16 cumulative exams given by the physical chemistry division of the Chemistry and Biochemistry department in a two-year period. These two-hour exams are given eight times a year. Each cumulative exam addresses one of the broad areas of physical chemistry: thermodynamics, statistical mechanics, kinetics, and quantum mechanics/spectroscopy. Normally, the student begins taking the cumulative exams at the start of the second year and continues until six are passed or 16 are attempted. In addition, the student must complete satisfactorily (earning a "B" or better) senior-level electricity and magnetism courses (PHY 4323–4324 or their equivalent) and one special topics in physics course (PHY 6938r) approved by the student's supervisory committee. The physical chemistry cumulative exams are based in part on the courses CHM 5440, 5460, 5461, 5480, 5481, and 5585.

Option B. The student may take and pass the written comprehensive examination in physics which covers graduate-level mechanics, statistical mechanics, electrodynamics, and quantum mechanics. In addition, the student must pass (earning a "B" or better) thermodynamics and statistical mechanics (CHM 5460 or the equivalent), one other graduate-level physical chemistry course, and one special topics in physics (PHY 6938r) approved by the student's supervisory committee.

The form of the examination proposed above is designed to make optimum use of the student's background while emphasizing the fundamental unity of the program.

The oral portion of the comprehensive examination shall emphasize the area of the student's proposed research, but the student will also be expected to be familiar with basic concepts in chemical physics.

2. Students will be required to present at least **one seminar** in the regular physical chemistry–chemical physics seminar series during their period of study for the master's or doctoral degree.
3. The **supervisory committee** shall consist of a) the major professor who will be a member of the chemical physics faculty, b) three additional members of the chemical physics faculty (not all from the same area), and c) a graduate faculty representative not from the chemical physics faculty.

Definition of Prefix

PHY—Physics

Graduate Courses for Chemical Physics Majors

- PHY 5971r. **Thesis (3–6).** (S/U grade only.) A minimum of six semester hours credit is required.
- PHY 6980r. **Dissertation (1–12).** (S/U grade only.)
- PHY 8969r. **Preliminary Doctoral Examination (0).**
- PHY 8976r. **Master's Thesis Defense (0).**
- PHY 8985r. **Dissertation Defense (0).**

Department of CHEMISTRY AND BIOCHEMISTRY

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.chem.fsu.edu/>

Chair: Timothy M. Logan; **Associate Chair:** William T. Cooper; **Professors:** Alabugin, Bruschiweiler, Cooper, Cross, Dalal, Dorsey, Holton, Krafft, Kroto, Li, Logan, Marshall, Mattoussi, Sang, Saltiel, Schlenoff, Steinbock, Stiegman, Strouse; **Associate Professors:** Dudley, Goldsby, Hilinski, Lattner, McQuade, Miller, Yang, Zhu; **Assistant Professors:** Knappenberger, Roper, Saha, Shatruk, Stagg; **University Professor:** Kasha; **Honors Lecturer:** Kearley; **Coordinator of General Chemistry Laboratories:** Dillon; **Coordinator of Organic Chemistry Laboratories:** Profeta; **Professors Emeriti:** Choppin, Clark, DeTar, Dougherty, Fulton, Herz, Johnsen, Light, Linder, Mellon, Safran, Schwartz, Sheline, Vickers; **Professors Emerita:** Gilmer, Hoffman

The graduate program in chemistry and biochemistry at Florida State University began in 1949. From this relatively recent beginning, the department developed rapidly to a position of prominence in the Southeast and has gained international recognition for the quality of the graduate education it offers. The department offers programs leading to the Master of Science (MS) and Doctor of Philosophy (PhD) degrees in analytical, inorganic, organic, physical, materials, and biochemistry. Interdisciplinary programs leading to advanced degrees in molecular biophysics are offered in cooperation with the departments of Physics and Biological Science. The department also participates in interdisciplinary programs in materials science, supercomputing, and structural biology.

The excellent research laboratories and 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 research operations are housed in the interconnected Dittmer Laboratory of Chemistry and Molecular Biophysics buildings, as well as in the newly-opened, 168,000 square foot Chemical Sciences Laboratory. 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 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 FSU NMR Facility has 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 Varian 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 Biochemical Synthesis and Services Laboratory (BASS) carries out synthesis of DNA, RNA, and peptides, as well as the sequencing of proteins. The staff trains all students in the use of the equipment in the lab, which includes one DNA and three protein synthesizers, ten liquid chromatographs, UV-VIS, fluorescence and circular dichroism spectrometers, two capillary electrophoresis systems, and two calorimeters. Other major instrumentation available in the department include Multi-Angle Laser Light Scattering (MALLS) and 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, and Thermo Scientific Nanodrop ND-1000 spectrophotometer. 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 woodworking shops in support of teaching and research activities.

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 Field Franklin Award for Outstanding Achievement in Mass Spectrometry, the American Chemical Society Award in Chromatography, the American Chemical Society Award in Analytical Chemistry, the Chemical Manufacturing Association award for excellence in chemical education, National Science Foundation CAREER awards, Sloan Fellowships, and numerous regional and local awards for both research and teaching. Three faculty are now American Chemical 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 course MS program is more rigidly structured. A handbook of information for graduate students, including specific departmental and program requirements for each degree program, 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 this ability during their first year of graduate study. The department may require international students to participate in remedial programs in spoken English and to take a test of spoken English.

Requirements for 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. 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 Course-Type Master of Science (MS) Degree in Chemistry

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. At least three hours of directed individual study (DIS) must also be taken. A supervisory committee must be formed to guide the student.

Some teaching experience is required. The supervisory committee will determine the amount, consistent with the student's experience and goals. A 3.0 grade point average must be maintained in all formal chemistry coursework. Students must give at least one seminar in the area of their concentration.

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.

As early as practical after beginning graduate study, students 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 portion 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 and defense of an original research proposal. The oral portion consists of defense of a research prospectus that focuses on the student's current and future research. All the preliminary examination requirements must be completed within three years of beginning the program.

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.

Definition of Prefixes

BCH—Biochemistry (Biosphysics)

CHM—Chemistry

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). Prerequisites: CHM 2210, 2211. 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 biogeochemical information.

CHM 5138. Mass Spectrometry (3). Prerequisite: Graduate standing. 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). 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). 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). Instrumentation and techniques in electrochemistry, including such topics as electrode processes, potentiometry, voltammetry, and coulometry.

CHM 5154. Chemical Separations (3). The primary theme will be chromatography, including gas-solid, gas-liquid, capillary gas, ion-exchange, and high-performance liquid methods. Emphasis will be placed on the fundamental physical processes, modern instrumentation, and response characteristics of detectors relevant to these methods. Ancillary techniques to be 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 up to a maximum of four semester hours.

CHM 5454. Polymer Characterization (3). Course covers the characterization of synthetic polymers by various analytical techniques, including spectroscopy, molecular weight measurements, structure, surface studies and mechanical properties. 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: Introductory biochemistry or instructor permission. 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). Pre- or co-requisite: BCH 4053 or equivalent. 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). Pre- or co-requisite: BCH 4053 or equivalent. 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 twelve semester hours or a total of four times.

BCH 5887r. Special Topics in Biochemistry and Cell Biology (1–3). May be repeated to a maximum of twelve semester hours or a total of four times.

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.

CHM 5506. Physical Chemistry of Macromolecules I (3). Prerequisite: Two semesters of physical chemistry or instructor permission. 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. Crosslisted under physical chemistry.

CHM 5507. Physical Chemistry of Macromolecules II (3). Prerequisite: Two semesters of physical chemistry or instructor permission. 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. Crosslisted under physical chemistry.

Inorganic Chemistry

CHM 5442. Kinetics and Mechanisms (3). Prerequisite: CHM 4610 or instructor permission. 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). Prerequisite: CHM 4610 or an appropriate upper-level undergraduate inorganic course. Descriptive chemistry, including main group elements and organometallic chemistry.

CHM 5680r. Current Topics in Inorganic Chemistry (1–3). Currently rotates between physical inorganic (emphasis on solid state and materials) and kinetics and mechanisms (emphasis on transition metal chemistry). May be repeated to a maximum of nine semester hours.

CHM 5681r. Current Topics in Inorganic Chemistry (1–3). Group theory and physical methods. 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 5715r. Topics in Materials Chemistry I (1). Recommended prerequisite: Involvement in materials research. This course introduces materials chemistry, focusing on the structure, properties, and functions of metals and alloys, glasses and ceramics, semiconductors, and nanomaterials. May be repeated within the same term to a maximum of three semester hours.

CHM 5716r. Characterization of Materials I (1). Recommended prerequisite: Involvement in materials research. This course introduces materials chemistry and focuses on the structure, properties, and functions of metal alloys, glasses, ceramics, semiconductors, and nanomaterials. May be repeated within the same term to a maximum of three semester hours.

CHM 5717r. Characterization of Materials II (1). 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. May be repeated within the same term to a maximum of three semester hours.

CHM 5718r. Topics in Materials Chemistry II (1). Recommended prerequisite: Involvement in materials research. This course introduces materials chemistry, focusing on the structure, properties, and functions of polymers; organic and soft materials, and bio-inspired materials. May be repeated within the same term to a maximum of three semester hours.

CHM 6936. 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.

CHM 6937. 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.

Organic Chemistry

CHM 5225. Advanced Organic Chemistry—Structure (3). Advanced description of structural stereochemistry, stereochemical aspects of reactions, theoretical aspects of structure.

CHM 5226. Advanced Organic Chemistry—Reactions (3). An advanced treatment of reactions of importance in organic syntheses.

CHM 5245. Physical Organic Chemistry (3). 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). Lecture. Prerequisite: CHM 5226. Lecture. 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). 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). Prerequisites: CHM 5460, 5480. Topics in this course include 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: CHM 4610 or instructor permission. 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 bioorganic. 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). Fundamentals of thermodynamics and basic concepts of quantum and classical statistical mechanics, thermodynamic functions from spectroscopic data, and gas imperfections.

CHM 5461. Advanced Statistical Mechanics (3). Prerequisites: CHM 5460, 5480. Lecture. Foundation of quantum and classical statistical mechanics; density matrix formulation; correlation functions; dense systems.

CHM 5470. Valence Theory (3). 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). Basic theoretical concepts and mathematical framework; applications to simple systems.

CHM 5481. Advanced Quantum Mechanics (3). Prerequisite: CHM 5480. Lecture. Mathematical and conceptual foundation; statistical nature of quantum theory; time dependent formulations.

CHM 5506. Physical Chemistry of Macromolecules I (3). Prerequisite: Two semesters of physical chemistry or instructor permission. 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). Prerequisites: Two semesters of physical chemistry or instructor permission. 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). Prerequisites: CHM 5460, 5480. 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 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). The course may be repeated to a maximum of thirty 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 thirty semester hours.

CHM 5833r. Directed Individual Study (1-6). (S/U grade only.) May be repeated to a maximum of thirty 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.) May be repeated to a maximum of five semester hours. 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. 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.)

CHILD DEVELOPMENT:
see Family and Child Sciences

Department of CIVIL AND ENVIRONMENTAL ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Web Page: <http://www.eng.fsu.edu/cee/>

Chair: Kamal S. Tawfiq; **Professors:** Chen, Huang, Moses, Ping, Spainhour, Tawfiq, Wekezer; **Associate Professors:** AbdelRazig, Abichou, Chan Hilton, Mtenga, Sobanjo; **Assistant Professors:** Clark, Jung, Rambo-Roddenberry, Watts; **Associate in Civil Engineering:** Adalier; **Assistant in Civil Engineering:** Ahmad, Pamuk; **Emeriti:** Dzurik, Nnaji

The department offers a Master of Science (MS) and a Doctor of Philosophy (PhD) program with concentrations in structural, geotechnical, traffic and transportation, construction, water resources and environmental engineering. Special areas of emphasis in civil engineering are bridge design, bridge management systems, construction management, coastal construction, structural stability, and structural reliability; geo-environment, pavements, and soil dynamics; transportation networks and multimodal system; 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.

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, the traffic automation and innovation laboratory (TRAIL), and traffic 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.

Pavement laboratory facilities include equipment for resilient modulus characterization of highway materials (MTS Load System, TestStar Control Unit, Triaxial Testing System, and Compaction Set). Electronic data acquisition systems, PC computers, and pavement engineering software systems are available for research and instructional use.

Construction materials laboratory facilities include equipment for compression strength testing, concrete, mixer, MTS shock tester, L.A. abrasion test machine, and MTS test system.

A structures lab, two stories high, 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 systems for bridges, buildings, etc. The laboratory is equipped with state-of-the-art vertical and lateral loading systems, together with automated data acquisition systems.

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 department houses the Institute for Transportation Technologies (ITT), which is well equipped with the state-of-the-art, high-performance computing environment to pursue transportation related research. The equipment includes a Silicon Graphics Origin 2000 technical server with sixteen parallel processors, and a cluster of workstations for fast visualization, and pre- and post-processing. This advanced computing environment is available primarily to graduate students working as research assistants with departmental faculty. The department also has a Sun Ultra-10 workstation that is used for environmental engineering research.

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 score of 1000 on the combined verbal and quantitative portions of the general aptitude test of the Graduate Record Examination (GRE). 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

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/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)

Doctoral Admission Requirements

Admission requirements for the Doctor of Philosophy (PhD) degree include the following:

1. A Master of Science (MS) degree in civil or environmental engineering or a closely related field;
2. A grade point average (GPA) or 3.0 on a 4.0 scale for all undergraduate and graduate work;
3. A minimum score of 1100 on the Graduate Record Exam (GRE) for combined verbal and quantitative portions;

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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;
7. If feasible, 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. The MEng option also requires the student to pass a comprehensive exam.

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 adviser and, for the MS thesis option, also a supervisory committee. The general course requirements for the MS thesis and MEng options are given below.

Course Distribution	MS Thesis	MEng Non-thesis
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-theses project with oral defense	N/A	N/A3
Graduate seminar	0	N/A0
Comprehensive exam	N/A	0
Total credit hours required for the master's degree	30	33

Graduation requirements include a cumulative grade point average of 3.0 or better and the successful defense of a thesis (MS) or passing of the comprehensive exam (MEng). All of the above requirements must be met within seven calendar years.

Doctoral Degree Requirements

The program of study for the PhD degree is flexible and depends on the individual student's background and objectives. 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 adviser. 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
MS Requirements	0	30
Depth area	9	9
Supplementary electives	9–18	9–18
Minor courses	0–9	0–9
Dissertation	24	24
Graduate seminar	0	0
Total credit hours for the doctoral degree	51	81

A **residency requirement** ensures that the doctoral students contribute to and benefit from the complete spectrum of educational, professional, and enrichment opportunities provided by the College of Engineering. After thirty semester hours of graduate work, or being awarded the master's degree, the student must be continuously enrolled in the FAMU—FSU College of Engineering, Department of Civil and Environmental Engineering for a minimum of twenty-four graduate semester hours in any period of twelve consecutive months.

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 problem 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 that student. Please visit the department Web site to learn more about individual faculty research. The department chairman 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>. To access the status of your financial aid information, please contact FSU at (850) 644-0539 or on the Web at <http://www.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, Florida 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
 ENV—Engineering: Environmental
 TTE—Transportation Engineering

Graduate Courses

Construction Engineering

CCE 5035. Construction Planning and Scheduling (3). Prerequisite: CCE 4004. 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: CCE 4004 and EGN 3443. 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; contract specifications, and contract claims (schedule impact) analysis.

Geotechnical Engineering

CEG 5015. Advanced Soil Mechanics (3). Prerequisite: CEG 3011. 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 3011. Design of spread footings, pole and caisson foundations, retaining structures and waterfront structures. Investigation of slope stability.

CEG 5127. Highway and Airport Pavement Design (3). Prerequisite: CEG 4801. 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 5705. Environmental Geotechnics (3). Prerequisite: CEG 3011. 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 covers 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, and 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 hours.

CES 5144. Matrix Methods for Structural Analysis (3). Prerequisites: CES 4101 and MAP 3305. This course covers selected fundamental techniques, including energy methods, for the formulation of the stiffness method for structural analysis. Topics include 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. 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 covers 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. Earthquake/Wind Engineering (3). Prerequisites: CES 4101 and MAP 3305. This course covers fundamentals of structural dynamics for earthquake and wind loading. Topics include response of undamped and damped single/multi degree-of-freedom structures subjected to earthquake or wind dynamic loadings, response spectra, and Fourier analysis and frequency domain.

CES 5606. Advanced Steel Design (3). Prerequisites: CES 4101 and CES 4605. This course covers 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 Concrete Design (3). Prerequisites: CES 4101 and CES 4702. This course covers advanced topics pertaining to complex reinforced concrete elements and structures. Topics include analysis and design for torsion, biaxial columns, slender columns, two-way slabs, retaining walls, shear walls, deep beams, 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 design of prestressed concrete beams for flexure and shear, design of slabs, prestressing losses, serviceability of prestressed concrete members, and precast members.

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. 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, 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. Course presents advanced hydraulic concepts and their incorporation into the design process. Methods of solving such problems are also presented.

CWR 5305. Urban Stormwater Runoff (3). Prerequisite: CWR 3201. Corequisite: CWR 4101. This course investigates the effects of urban stormwater runoff on surface and ground water resources. Topics include legal and regulatory requirements, methods of engineering analysis and design of storm water systems.

CWR 5635. Water Resources Planning and Management (3). Prerequisites: CWR 4101 and CWR 4202. 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 clean up 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. Systems analysis techniques 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. 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 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. 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. 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 3201, EES 3040, and EES 3040L. 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: EES 3040 and EES 3040L. Analysis of various measures of environmental quality. Impacts on different types of resources. Benefit-cost in environment impact assessment.

Transportation and Traffic Engineering

TTE 5205. Traffic Engineering (3). Prerequisite: TTE 3004 or equivalent. Nature, characteristics, and theories of traffic flow. Street and highway traffic problems. Traffic survey procedures. Origin-destination studies. Theory and design of automatic control of traffic systems. Transit systems.

TTE 5206. Advanced Traffic Flow Analysis (3). Prerequisite: TTE 3004. Course covers microscopic and macroscopic characteristics, traffic stream models, demand-supply analysis, shockwave analysis, queueing analysis, computer simulation models, intelligent transportation systems.

TTE 5256. Traffic Operations (3). Prerequisite: TTE 3004. Course covers principles of capacity, freeways, rural highways, urban streets, transportation systems, and computer simulation.

TTE 5270. Intelligent Transportation Systems (3). Prerequisite: TTE 3004. 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 5805. Highway Geometric Design (3). Prerequisites: CEG 2202, CEG 2202L, and TTE 3004. Principles and procedures for the geometric design of highways and streets; considerations of traffic, land use, and aesthetic factors.

Other Courses

CGN 5310. Engineering Data Systems (3). 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 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). 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 (1-6). (S/U grade only.) A thesis representing six credit hours of academic work is a requirement for the master's degree in civil engineering. This course provides a means of registering for thesis work and recording progress toward completion. A maximum of six credit hours may be applied toward the master's degree. May not be repeated for more than six semester credit hours.

CGN 5974r. Master's Project (3). (S/U grade only.) A master's project representing three semester hours of academic work is a requirement for the MS degree with the non-thesis option in civil engineering. This course provides a means of registering for master's project work. May be repeated twice; will focus on research, design, or evaluation of a relevant civil engineering problem.

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. PhD candidacy required.

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. A dissertation representing twenty-four semester hours of academic work is a requirement for the PhD degree in civil engineering. This course provides a means of registering for dissertation and recording progress toward completion. 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.

**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**

Department of CLASSICS

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://classics.fsu.edu/>

Leon Golden Professor and Chair: John M. Marincola; **M. Lynette Thompson Professor:** de Grummond; **Professors:** Cairns, Pullen; **Associate Professors:** Fulkerson, Pfaff, Sickinger, Slaveva-Griffin; **Assistant Professors:** Luke, Romano, Stover; **Assistant in Classics:** Branscome; **Emeriti Faculty:** 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 and a minimum of 1100 on the aptitude test of the Graduate Record Examination (GRE);

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

3. 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 of at least 1300, with a verbal score of at least 650;

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

- 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-);
- 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 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. This program may be taken under the course option or the thesis option. The department recommends the course option.

Requirements for Course Option (Thirty-two semester hours total)

Students who choose the course option 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	4
Seminars (usually CLA 5799)	6
Archaeology courses	9
Electives in classics	9
CLA 8961r Comprehensive examination	0
CLA 5919 MA paper	3

Requirements for Thesis Option (Thirty-two semester hours total)

Students who choose the thesis option are required to write and defend a thesis to be placed on deposit with the university.

Required Courses	Required Hours
CLA 5936 Proseminar	1
CLA 5789r Fieldwork	4
Seminars (usually CLA 5799)	6
Archaeology courses	9
Electives in classics	6
CLA 5971r Thesis	6
CLA 8961r Comprehensive examination	0
CLA 8976r Thesis defense	0

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:

- One hour of identifications:
 - 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.
- Two hours of essays:
 - Select one essay from either the Bronze Age or Hellenic period;
 - 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. A student's thesis committee may vary. It is strongly recommended that at least two members of the committee be archaeologists.

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. This program may be taken under the course option or the thesis option. The department recommends the course option.

Requirements for Course Option (Thirty-three semester hours total)

Students who choose the course option 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

Requirements for Thesis Option (Thirty-one semester hours total)

Students who choose the thesis option are required to write and defend a thesis to be placed on deposit with the university.

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
LNW/GRW 8966r Translation examination	0
CLA 5971r Thesis	6
CLA 8976r Thesis defense	0

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 in the schools. Students hoping to proceed to doctoral-level work should also have some coursework in Greek. This program may be taken under the course option or the thesis option. The department recommends the course option.

Requirements for Course Option (Thirty-three semester hours total)

Students who choose the course option 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

Requirements for Thesis Option (Thirty-one semester hours total)

Students who choose the thesis option are required to write and defend a thesis to be placed on deposit with the university.

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
LNW 8966r Translation examination	0
LNW 5971r Thesis	6
LNW 8976r Thesis defense	0

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. This program may be taken under the course option or the thesis option. The department recommends the course option.

Requirements for Course Option (Thirty-three semester hours total)

Students who choose the course option 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

Requirements for Thesis Option (Thirty-one semester hours total)

Students who choose the thesis option are required to write and defend a thesis to be placed on deposit with the university.

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	3
GRW 8966r Translation examination	0
GRW 5971r Thesis	6
GRW 8976r Thesis defense	0

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 also gone on to teach in the 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). There are no comprehensive or translation examinations in this degree program. Students may, however, sit one of the translation exams in Greek or Latin, and that fact will be noted in letters of recommendation. This program may be taken under the course option or the thesis option. The department recommends the course option.

Requirements for Course Option (Thirty-three semester hours total)

Students who choose the course option 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

Requirements for Thesis Option (Thirty-one semester hours total)

Students who choose the thesis option are required to write and defend a thesis to be placed on deposit with the university.

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	9
CLA 5971r Thesis	6
CLA 8976r Thesis defense	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.

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 Literature in Translation

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). Analysis of Minoan and Mycenaean art and architecture and of the archaeological evidence for pre-historic culture in Crete and Greece.

ARH 5119. Archaeology of Ancient Egypt (3). 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). Analysis of Etruscan art and architecture and of the archaeological evidence for Etruscan culture.

ARH 5140. Greek Art and Archaeology of the Fifth and Fourth Centuries B.C. (3). 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). 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). 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. 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. 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). Study of selected topics in Greek history in the Archaic, Classical, or Hellenistic period. May be repeated to a maximum of six semester hours.

CLA 5448r. Studies in Roman History (3). 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). 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.) 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.) 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). 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 credit 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). Research topics dealing with specific aspects of Greco-Roman literature and culture are examined. May be repeated when topics vary to a maximum of twelve semester hours.

CLA 6980r. Dissertation (1–12). (S/U grade only.) Prerequisite: CLA 8964r.

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, 8964r.

CLT 5295r. Studies in Greek Tragedy: Aeschylus, Sophocles, and Euripides (3). Readings and criticism of selected plays from the Greek tragedians in English translation.

CLT 5345. Studies in Greek and Roman Epic (3). Analysis of the principal pieces of epic literature from the classical world read in English translation.

CLT 5379r. Seminar in Ancient Mythology (3). 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). Study of 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). Study of 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). 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.

GRW 5215r. Studies in the Greek Prose Writers (3). 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). 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). Detailed study through the original texts of selected Greek poets. May be repeated to a maximum of six semester hours.

GRW 5505r. Greek Philosophical Writings (3). 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. 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 credit 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. Doctoral-level seminar 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 5069. Graduate Reading Knowledge Examination (0).** (S/U grade only.)
- LNW 5316r. Studies in Roman Drama (3).** 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).** 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).** 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).** 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).** 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. 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. Doctoral-level seminar 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

Certificate Program in the Institute for COGNITIVE SCIENCES

COLLEGE OF ARTS AND SCIENCES

Director: Michael Kaschak, Department of Psychology

Certificate in Cognitive Science

This certificate 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 this certificate, 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 certificate itself is not a degree and is not a requirement in any degree program.

A student wishing to enter the program should select appropriate courses from those listed below, with the advice and consent of the student's major professor or degree adviser. This list, signed by the student's major professor or adviser, is submitted to the director of the Institute for Cognitive Sciences, together with a letter of application briefly outlining the student's background and interest in the cognitive science certificate. The course of study then needs the approval of the director.

One course must be taken from each of the five areas below. A "B" average must be maintained, and no grade below 2.0 will be accepted. No course can be used to satisfy more than one area. For courses marked with an asterisk (*), consent of the instructor may substitute for stated prerequisites.

It should be noted that the required 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. A course required for a degree may also be used to satisfy the certificate 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 (when approved) (3)
PHI 6935r Seminar in Philosophical Topics (when approved) (3)
CIS 5930r Selected Topics in Computer Science (when approved) (1-3)
***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)
CAP 5615 Artificial Neural Networks (3)
CAP 6616 Autonomous Behavior in Artificial Neural Systems (3) (S/U grade only.)

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)
LIN 5772 Computational Linguistics (3)

Area IV: Systems Theory

- *COT 4420** Theory of Computation (3)
CAP 5605 Artificial Intelligence (3)
CIS 5930r Selected Topics in Computer Science [when approved] (1-3)

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 [when approved] (3)

School of COMMUNICATION

COLLEGE OF COMMUNICATION AND INFORMATION

Web Page: <http://www.comm.cci.fsu.edu/>

Director: Stephen D. McDowell; **Professors:** Arpan, Heald, Houck, Korzenny, McDowell, Raney, Nudd; **Associate Professors:** Adams, Bunz, Jordan, MacNamara, Opel, Pekurny, Proffitt, Rayburn; **Assistant Professors:** Castillo, Cortese, Parker; **Associate in Communication:** Wallace; **Research Associates:** Gilmer, Halvorson, Laurents, Lindsay, Solomon, Zeigler; **Program Director:** Rodin; **Associate Scholar/Scientist:** Dubard; **Professors Emeriti:** 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 Hispanic Marketing Communication, Multicultural Marketing Communication, Project Management, and Digital Video.

Specifically, at the master's level programs of study are offered in communication with an emphasis in integrated marketing communication and media and communication studies. A master's program in corporate and public communication is offered at the Panama City, Florida, campus. At the doctoral level, programs of study are available in speech communication and mass communication.

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 varies and is competitive. All assistantships also provide assistance with course fees, subject to the availability of funds. Competitive scholarships are also offered each year.

In addition to University fellowships, the College of Communication and Information offers the college-wide teaching fellowship, which is awarded annually.

Applications and Admissions

1. The candidate should apply online to the University Graduate Admissions Office Web site at <http://admissions.fsu.edu>. The school application instructions are also available online at <http://www.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 or a Graduate Record Examination (GRE) score

(verbal plus quantitative) of at least 1000 (or a comparable score on the new GRE scoring system). 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 a GRE score of 1000 (or comparable score). All applicants must submit three letters of recommendation and completed University and school application forms.

Note: The master's and doctoral programs are highly competitive and admission may require more than the minimum GRE and GPA. Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

- Applicants for the doctoral program may be asked to complete an interview with the doctoral program committee, preferably in person although telephone 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.

If the student completed a master's degree in the School of Communication at Florida State University, the master's supervisory committee must have made a written recommendation that the student be approved to continue for the PhD degree at this University. In such cases, the student is expected to have completed a thesis option.

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 Intensive English 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 earned an English competency, some of these requirements may be waived.

Master's of Arts (MA) and Master of Science (MS) Degree

Supervisory Committee and Program of Studies

- 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.
- For non-thesis students, the area coordinator will serve as chair of the student's 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 division head, 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.
- 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.
- 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.
- 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.
- With the approval of the supervisory committee, up to six hours of letter-graded 4000-level work may be counted in the master's program. Courses taken at the 4000 level on an S/U basis may not be counted, nor may any work below the 4000 level.
- The program of study must be approved by all committee members, the division head 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 division head and the school director, and are attached to the student's original program of study.

- 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.
- Graduate students are required to earn grades of "B-" or better in all courses in their graduate major 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.
- There is no University-wide residency requirement.
- Each master's candidate must demonstrate, by term papers or thesis, writing skills that are acceptable to the student's committee.
- 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, 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.
- 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.
- 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.
- To qualify for the master's degree under the non-thesis program, the student must complete a minimum of thirty-three semester hours (or thirty-six semester hours with the coursework option), twenty-seven of which must be on a letter-grade basis, and either pass written and oral comprehensive examinations, and/or a project, or a residency. 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 project or residency report. Copies of clearance forms are signed and placed in the student's file.
- Written comprehensive examinations must be completed at least four weeks prior to the end of the semester. The oral defense is limited to a two-week period following the written portion of the comprehensive examination.
- 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 and be recommended for continuation by the supervisory committee before beginning doctoral coursework.
- A prospectus must be approved by all committee members prior to research or data collection for a thesis project. Signed copies are to be filed in the student's school folder.
- During registration for the final semester the student should enroll in master's comprehensive examination, master's thesis defense, project, or residency.
- At the same time, the student should make application for graduation and the diploma.
- The manuscript and final clearance adviser in the Graduate School must approve the form of the thesis before final preparation. It is recommended that students consult with this adviser early in the preparation stage and obtain a copy of *Guidelines and Requirements for Electronic Thesis, Treatise, and Dissertation Writers*.
- Prior to the oral defense of the thesis, an announcement must be sent to the Graduate School. 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, residency, project, or of comprehensive examinations, 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.

23. 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.
24. 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.
25. At the office of permanent records, evaluation, and graduation, the candidate will receive a final term degree clearance form which provides space for certification by all parties concerned that all requirements for the degree have been met. After the oral defense, the master's candidate must submit to the manuscript and final clearance adviser this completed form and an electronic copy. Notice the submission deadline published in the *Registration Guide*. It is courteous to give all members of the committee and the school copies of the thesis. The Graduate School sends the major professor one electronic copy.

Master's of Arts (MA) and Master of Science (MS) Degree Programs

Master's Degree in 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 are 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 Web site at <http://www.comm.cci.fsu.edu> or contact the school.

Master's Degree in Communication 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. Thirty-three semester hours as a minimum are required; thirty-six semester hours may be required with the 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 Web site at <http://www.comm.cci.fsu.edu>, or contact the school.

Doctor in Philosophy (PhD) in Communication

Supervisory Committee and Program of Studies

1. A provisional adviser is assigned to the student at the time of acceptance into the program. During the student's first semester in the program, the provisional adviser 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 adviser, will be the student's principal adviser in choosing members for the doctoral supervisory committee, and will assist the student in developing a preliminary program of studies. 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 studies, reviews and approves any proposed revisions to the program of studies, and designs and evaluates the doctoral preliminary examination. Members of the committee must be selected by the student prior to the end of the student's second semester of enrollment. The members of this committee will be decided by mutual agreement among the student, the major professor, and the prospective committee members. 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. Early in 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 studies. All changes will be reviewed and a final, corrected version of the program of studies is signed and sent to the director of doctoral studies for the additional signatures.
6. The doctoral program often requires seven or eight semesters of full-time 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.
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 3.0 (out of a possible 4.0) must be maintained for all PhD work.
8. All doctoral students must be continuously enrolled on the University campus or in one of its centers for a minimum of twenty-four semester hours during one academic year. The academic year is defined as enrollment in any period of twelve consecutive months.
9. Prior to the preliminary examinations, every doctoral student is required to submit an original scholarly paper to an appropriate journal and/or a state, regional, or national convention.
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 director of doctoral studies, in consultation with the doctoral program committee or the student's supervisory committee.
13. At the end of coursework, students will enroll for and complete COM 8964 Doctoral Preliminary Examination (0 semester hours). 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. Regardless of the testing environment(s) selected by the committee, the exam will consist of a minimum of twelve hours of written examination. 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 (see 3 above).
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 semester hours) 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 adviser in the Graduate School must approve the formatting of the final dissertation. The student should consult with the clearance adviser early in the preparation stage and closely follow the formatting rules set out in the Guidelines and Requirements for Electronic Thesis, Treatise, and Dissertation Writers publication.
22. Prior to the oral defense of the dissertation, an announcement must be sent to the Graduate School. 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 should be scheduled at least two 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. The Final Term Degree Clearance form provides spaces for certification by all parties concerned that all requirements for the degree have been met. The form must be signed by the major professor, school director, and dean of the College following the oral defense. The doctoral candidate must submit the form to the manuscript clearance adviser in the Graduate School after all signatures have been acquired and by the published final approval deadline.
25. After final approval by the supervisory committee, the student must submit the final manuscript electronically to the manuscript clearance adviser in the Graduate School. In addition to the electronic copy of the document, students must submit one original signed signature page, one paper copy of the title page, and several other forms requested by the Graduate School. Additionally, as a courtesy, the student should give all members of the supervisory committee electronic copies of the dissertation.

Doctor in Philosophy (PhD) Degree Programs

PhD in Communication

The School of Communication offers two PhD program emphases: mass communication and speech communication. The general requirements of each are similar. The primary differences between the two emphasis areas are: 1) the nature of the courses taken by the students, 2) the different faculty members traditionally associated with each, and 3) the emphasis area distinction itself, which may be of importance to students based on future career plans.

Note: The two emphasis areas are represented by different administrative codes in FSU records system; so, students should designate their chosen emphasis area during the application process.

Minimum Required Hours: Minimum course requirements are determined by the doctoral supervisory committee in accordance with school and university requirements. Students may receive credit for master's coursework approved by their supervisory committee. Both programs include twenty-four semester hours for the dissertation.

Required Cognate: An outside cognate of twelve semester hours approved by the doctoral supervisory committee is required.

Teaching/Research: Students must complete five semester hours of COM 5911r or COM 5940r. Teaching and research should be an ongoing activity throughout the doctoral program, but no more than five semester hours of supervised teaching or research may apply toward the degree.

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 Web site at <http://www.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 within one of two subfields: mass communication or speech communication. 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, organizations, or effects; 4) research design and data/textual analysis; and 5) teaching undergraduate students at a state-supported university.

Mass Communication

Career Goals: Teach mass communication in a college or university; management position within a communication or research organization; consultant in media, research, or marketing.

Additional Educational Goals: Knowledge of mass communication theories and research; training in research design, statistics, and computing; experience with various methods for basic and applied communication research; study of mass media institutions, their management, regulation, and evolving technologies; opportunity to teach undergraduate communication courses.

Skills to be Developed: Statistics, research design, and computing; quantitative and qualitative research methods; effective written communication.

Speech Communication

Career Goals: Designed for students interested in college or university teaching and research.

Educational Goals: Acquainting students with the major academic areas of the field of communication: communication-rhetorical theory, persuasion-theory and practice, interpersonal, small group theory and practices, includes public speaking and debate.

Skills to be Developed: Ability to teach at college or university level with pertinent skills in instructional planning, evaluation, etc.; ability to conduct independent research.

Areas of Special Knowledge: Required for all graduates to have a working knowledge of items listed under 'Educational Goals' above with an emphasis on one, or perhaps two, of those areas.

Certificates

The School of Communication offers graduate level certificates in Hispanic Marketing Communication, Multicultural Marketing Communication, Project Management, and Digital Video Production. 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 5415. Hispanic Marketing Communication (3). This course prepares professionals to field the increasing number of positions that require marketing expertise to serve the US Hispanic market.

ADV 5416. Multicultural Marketing Communication (3). Prerequisites: ADV 5415 and COM 5331. This graduate seminar is the capstone course for those students pursuing a degree in Integrated Marketing Communication with an emphasis on Hispanic Marketing Communication. The 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). 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.) 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). The 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). Introduces students to the methods of assessing organizational communication including survey, feedback methodology, assessment, and related issues in applied research.

COM 5312. Research Methods in Communication (3). Introduction to quantitative and qualitative research methods.

COM 5314. Measurement of Listener-Viewer Attitude and Response (3). Quantitative and qualitative research methods, with particular emphasis on surveys, for measuring mass audiences.

COM 5316. Statistical Methods in Communication Research (3). Statistical methodologies for communication research.

COM 5317. Content Analysis in Communication Research (3). Content analysis methodologies for communication research.

COM 5331. Computers in Communication Research (3). Application of computers to the analysis of communication research data. Use of microcomputers to build and manage quantitative research databases. Emphasis on SPSS/PC+. Graphing and report writing.

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). Prerequisite: COM 5338. This course, a continuation of COM 5337, 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). 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). 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 5467. System Thinking and Project Management (3). This course provides background and comparisons of strategic planning, and system thinking theories are presented. Project and management issues also are discussed.

COM 5469. Communication Planning and Dispute Resolution (3). Corequisite: COM 4465. 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 5546. Political Communication (3). Course provides students with insight into roots and bases of political communication.

COM 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine semester hours; duplicate registration allowed. School approval required.

COM 5911r. Supervised Research (1-5). (S/U grade only.) School approval required. 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.) 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.) School approval required. 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 will provide work experience to apply and extend knowledge learned within the master's program.

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). 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.) Doctoral students only. School approval required. To be taken in the semester preceding preliminary examination.

COM 6931r. Special Topics in Communication Research (3). 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 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). 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). 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. The 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). 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 5253. New Communication Technology: Theory and Research (3). Survey of key concepts and theoretical approaches in research on new communication technology.

RTV 5292. Advanced Narrative Production (3). This course enables students to produce original student narratives through writing, re-writing, pre-production, production, and post-production stages.

RTV 5325. 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 5702. Communication Regulation and Policy (3). Course studies laws, regulations and policies for broadcasting, cable, telephone, and computer-communication industries.

RTV 6425r. Advanced Seminar in New Communication Technologies (3-6). 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). Students examine the origins of rhetorical theory during the classical period of Greece and Rome. Focus rests on the rhetorical theories of Plato, Aristotle, Cicero, and Quintilian.

SPC 5442. Group Dynamics and Leadership (3). A review of important concepts and research in group process and group leadership.

SPC 5545. Studies in Persuasion (3). Lecture, readings, and discussion of human behavior theories as applied to persuasive communication.

SPC 5614. Criticism of Contemporary Public Address (3). A critical examination of principal speakers to and for the public.

SPC 5635. Rhetoric of Race Relations (3). Criticism of selected speakers and speeches since 1954, studied against a background of social, political, and intellectual issues.

SPC 6236. Contemporary Rhetorical Theory and Criticism (3). Prerequisite: SPC 5234. Analysis of major theories of public communication and their application as critical tools.

SPC 6306. Contemporary Topics in Interpersonal Communication (3). 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 6920r. Colloquium in Speech Communication (3). 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. Visual Communication (3). This laboratory focuses on the creation and analysis of visual messages. Emphasis is placed on visual literacy, message construction and interpretation, as well as on design principles.

School of COMMUNICATION SCIENCE AND DISORDERS

COLLEGE OF COMMUNICATION AND INFORMATION

Web Page: <http://www.commdisorders.cci.fsu.edu/>

Director: Kenn Apel; **Professors:** Apel, La Pointe, Morris, Woods; **Associate Professors:** Horton, Jackson, Lasker, Stierwalt; **Assistant Professor:** Macrae; **Associates in Communication Science and Disorders:** Gessner, Justl, Nimmons, Scott, Snowden; **Assistants in Communication Science and Disorders:** Davis, Lundblom, Montgomery, Walker

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 **Early Intervention Laboratory** includes 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 **Adult Language Laboratory** provides facilities for the study of social and communication problems associated with acquired brain injury and illness in adults. These facilities are equipped with evaluation instruments and materials, audio/video equipment, and computers to facilitate data analysis.

The **Research on Language and Literacy Lab** 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 **Neurolinguistic-Neurocognitive Research Center** is an interdisciplinary laboratory located in the Regional Rehab Center. A wide array of equipment and software is available to measure cognition and language. A GaitRite system assesses 30 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, EKG, respiratory, and cardiac function.

For further information about all graduate admission and degree requirements contact: *Academic Program Assistant, School of Communication Science and Disorders, Florida State University, Tallahassee, FL 32306-1200*; phone: (850) 644-2253; e-mail: erica.lee@cci.fsu.edu. Please include your mailing address.

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 so they 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. 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.

A student's undergraduate background influences the time required to complete the graduate degree. Students obtaining master's degrees from Florida State University generally graduate from the program in six academic semesters, which includes a semester of off-campus internship.

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: <http://www.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 2 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 the on-campus program and in the summer for the distance learning program. There are additional requirements and procedures for admission to the program. Please see the department Web site at <http://www.commdisorders.cci.fsu.edu/> for submission dates of application materials and additional information.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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 must be submitted by January 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 test. There are additional requirements and procedures for admission to the program. Please see the department Web site at <http://www.commdisorders.cci.fsu.edu/> for additional information.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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, and will serve until the student is advanced to candidacy. Three members must hold doctoral directive status, and one member with this status must be selected from a different department (the Representative at Large). 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 adviser 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 adviser 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 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 repeats with different topics covered each semester. Topics covered include clinical bases for planning and conduct of therapy, behavior management, counseling, ethics, certification and licensure, instrumentation, and clinical research methods.

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 is an advanced course 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. Prepares students to facilitate development in children's language 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). Prerequisite: SPA 4503. 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 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. Content discussed relates to people evaluated during accompanying laboratory.

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. Application of AAC systems for non-speaking individuals with developmental and acquired disorders is covered.

SPA 5562. Advanced Seminar in Augmentative and Alternative Communication (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. To be completed in the final semester of the master's program. May be repeated to a maximum of twelve semester hours.

SPA 5971r. Thesis (1-6). (S/U grade only.) A minimum of six semester hours must be earned.

SPA 5972r. Advanced Master's Thesis (1-6). (S/U grade only.) A minimum of six semester hours is required.

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, up 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 6804. 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.

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 will be 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. 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, up 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 8966. Master's Comprehensive 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.)

COMMUNITY PSYCHOLOGY:
see Psychology

COMPARATIVE POLITICS:
see Asian Studies; Political Science

COMPARATIVE PSYCHOLOGY:
see Psychology

COMPUTATIONAL BIOLOGY:
see Mathematics

COMPUTATIONAL NUMERICAL METHODS:
see Mathematics

**COMPUTER APPLICATIONS CONCEPTS, DESIGN
AND ARCHITECTURE, INFORMATION SYSTEMS, AND
PROGRAMMING:**
see Computer Science

Department of COMPUTER SCIENCE

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.cs.fsu.edu/>

Chair: Robert Van Engelen; **Professors:** Aggarwal, Baker, Burmester, Hawkes, Mascagni, G. Tyson, Van Engelen, Whalley, Yuan; **Associate Professors:** Duan, Kumar, Liu, Schwartz, Srinivasan, Wang; **Assistant Professor:** Zhang; **Courtesy Professors:** De Medeiros, Desmedt, Evans, Jones; **Computing Resources Manager:** Langley; **Associates in Computer Science:** Chang, Lacher, Langley, Myers, A. Tyson; **Professors Emeriti:** 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, real-time 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;
- computer and network security, including cryptography; and
- other areas, including 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** is dedicated to synthesis of education and research through the combined focus on theory and application of information security techniques. The center and FSU were recognized by NSA and DHS as a National Center of Academic Excellence In Research (CAE-R) in 2009.

The **Architecture and Compilers for Embedded Systems (ACES) Laboratory** investigates a wide variety of issues related to embedded systems architecture. Tools are constructed to assist compiler writers in optimization and retargeting.

The **Center for Applied Vision and Imaging Sciences (CAVIS)** conducts research motivated by psychophysical data and neurophysiological findings to develop models for real-world problems.

The **Large-Scale Experimental Network and Systems Laboratory** investigates issues related to QoS routing, communication algorithms, and message passing libraries.

The **E-Crime Investigative Technologies Laboratory** conducts research in the areas of cybersecurity and cybercrime.

Other active research groups subjects include the following: brain imaging, realistic illumination, Web-based 3D simulation, tools for distributed applications, tools for weather forecasting, probabilistic networks, knowledge-based management decision tools, random number generation, Monte Carlo and Quasi-Monte Carlo methods, grid-based computing, POSIX/Ada Real-time systems, application of fuzzy relations and non-classical logics, modeling and simulation environments.

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/current/grad> 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).

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/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 studies 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 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, information security, and software engineering. Each major offers thesis, project and course-based options.

Students admitted to the Computer Science PhD program can obtain an MS degree only if they do not already have an MS degree in Computer Science or a highly related field. Eligible PhD students wishing 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.

In **all** majors, a student must complete thirty-five semester hours in computer science courses numbered 5000 or above, including approved CIS 5930 and CIS 6930. Supervised teaching, supervised research, seminars, directed individual study, and courses with prefix CGS are excluded. As part of the thirty-five semester hours, each student is required to take CIS 5935, Introductory Seminar on Research (2), and at least **one** course from **each** of the following three core areas 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 (3)

More specific course requirements are associated with the specialized majors.

Information Security Major

A student in the information security major is 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:

- CDA 5140 Fault Tolerance and Reliability (3)
- 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)*
- COT 5410 Complexity of Algorithms (3)

Please refer to <http://www.cs.fsu.edu/academics/grad/infosec.html> for admission details.

Software Engineering (SE) Major

This major is currently suspended and is not accepting new applications for admission at this time.

A student in the software engineering (SE) major is required to take CEN 5035, Software Engineering (3), which also satisfies the software area requirement. A plan of study will be developed by the student and the major professor. A student in this major must have a minimum of one year of full-time equivalence of documented software engineering experience involving actual work as a salaried member of a software development team. Please refer to <http://www.cs.fsu.edu/current/grad> for admissions and professional experience details.

Thesis, Project, and Course-Based Master of Science (MS) Degrees

For each major, 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, in addition to CIS 5935, Introductory Seminar on Research (2), eight courses (twenty-four 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-five semester hours for the Master of Science (MS) degree. The eight 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, in addition to CIS 5935, Introductory Seminar on Research (2), nine courses (twenty-seven 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-five 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, in addition to CIS 5935, Introductory Seminar on Research (2), eleven courses (thirty-three 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 eleven courses in order to graduate under the course-based option. Approved CIS 5930/6930 courses count toward the eleven-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.

MS in Computer Criminology

The initial track for the MS CC degree is coursework only. The general degree requirements include four graduate criminology courses and seven graduate computer science (CS) courses related to information assurance and computer security for a total of thirty-three hours. The six required CS courses fulfill an NSA approved certificate program, which facilitates graduates from

the program in getting employment with a federal government agency or a government contractor after they graduate. A description of the certificate program is available at <http://www.cs.fsu.edu/current/grad/certificate.php>.

In addition, MS CC students have to complete certain undergraduate prerequisites, shown below, before graduating, and will likely have to complete a subset of these courses before being admitted to the MS CC degree program. Note that CIS 4385 is required for the FSU BS in Computer Criminology and the other four courses are required for the FSU BS in Computer Science and BA in Computer Science degrees.

Undergraduate Prerequisites for the MS CC Degree Program:

CDA 3101	Computer Organization II (3)
CIS 4385	Cybercrime Detection and Forensics (3)
COP 4530	Data Structures, Algorithms, and Generic Programming (3)
COP 4610	Operating Systems and Concurrent Programming (3)
COP 4710	Theory and Structure of Databases (3)

The graduation requirements include completing all of the undergraduate prerequisites, completing four graduate criminology courses, and completing seven graduate computer science courses. The graduate courses for the MS CC degree are listed below:

Criminology Courses for the MS CC Degree Program (Students must take at least three):

CCJ 5016	Crimes of the Powerful (3)
CCJ 5285	Survey of Criminal Justice Theory and Research (3)
CCJ 5606	Survey of Criminological Theories (3)
CCJ 5607	History of Criminological Thought (3)
CCJ 5636	Comparative Criminology and Criminal Justice (3)

Course descriptions for the above criminology courses are available at: <http://www.criminology.fsu.edu/p/academic-syllabi.php>.

Required Computer Science Courses for the MS CC Degree Program:

CIS 5370	Computer Security (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 5611	Advanced Operating Systems (3)
COP 5725	Database Systems (3)

One of the required four criminology courses can be a graduate criminology elective and one of the seven required computer science courses can be a graduate computer science elective. The four criminology courses can be taken in any order as none of these courses are prerequisites for any of the other courses. However, the six required graduate computer science courses each have undergraduate prerequisites that must be completed before the student will be allowed to take these courses.

MS in Computer Network and System Administration

The MS CNSA program has three options, similar to the MS CS degree, students may pursue a *coursework only*, *project*, or *thesis* option. In **all** options for the MS CNSA program, a student must complete thirty-five hours in computer science courses numbered 5000 or above, including CIS 5935, Introductory Seminar on Research (2). The other thirty-three hours will consist of regular courses, approved offerings of CIS 5930 and CIS 6930 (Special Topics), and at most nine thesis hours or six project hours if enrolled in the thesis or project options respectively.

In addition, 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 system administration internships for students.

At most, one course outside the department at the 5000 or 6000 level can also count toward the thirty-five hours if approved by the major professor and Director of Graduate Studies. Supervised teaching, supervised research, seminars, DIS, and courses with prefix CGS do not count toward the thirty-five hours. The student must receive a grade of "B-" or better on all graduate courses taken to satisfy the minimum course requirements of the degree (other than thesis and project hours). Once these minimum requirements are met it is permissible to take any subsequent courses on "S/U" basis. All work for the Master's degree, including any transferred credit, must be completed within seven calendar years of the date of graduation.

In addition, MS CNSA students have to complete certain undergraduate prerequisites, shown below, before graduating, and will likely have to complete a subset of these courses before being admitted to the MS CNSA degree program.

Undergraduate Prerequisites for the MS CNSA Degree Program:

CDA 3100	Computer Organization I (3)
CDA 3101	Computer Organization II (3)
COP 4530	Data Structures, Algorithms, and Generic Programming (3)
COP 4610	Operating Systems and Concurrent Programming (3)

The following courses are the core requirements for the MS CNSA degree.

Required Computer Science Courses for the MS CNSA Degree Program:

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 5611	Advanced Operating Systems (3)
COP 5570	Concurrent, Parallel, and Distributed Programming (3)

It is possible for the MS CNSA student to fulfill an NSA approved certificate program, which facilitates graduates from the program in getting employment with a federal government agency or a government contractor after they graduate. The MS CNSA student can use two of the available elective courses to take COP 5725, Database Systems and CIS 5370, Computer Security to fulfill the requirements. However, this certificate program is limited to U.S. citizens only. A description of the certificate program is available at <http://www.cs.fsu.edu/current/grad/certificate.php>.

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 exam); 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 five core courses (fifteen hours), one course in each of the three areas (Software, Systems, and Theory) and two additional courses from the remaining set of core courses. Equivalent courses taken at other institutions must be approved by the Portfolio Evaluation Committee (PEC). Additionally the student must complete CIS 5935 Introductory Seminar on Research (2).

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. 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 ten courses (thirty hours) at the 5000 or 6000 level, as advised by the student's major professor and supervisory committee. Five of these courses (fifteen hours) must meet the PhD core course requirement. The remaining five courses (fifteen 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.

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.

Once a student has completed thirty semester hours of graduate work or has been awarded the Master's degree, the student must be enrolled on The

Florida State University Tallahassee campus for a minimum of twenty-four graduate semester hours within a continuous twelve-month period in order to meet the university's residency requirement.

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)

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 at <http://www.cs.fsu.edu/current/grad/>.

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 (Area) Examination

The preliminary (area) examination (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 QE.

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
- pass CIS 8964, the preliminary exam, which consists of passing the area examination

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 Application Development
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

Graduate Courses

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. 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 5638. Pattern Recognition (3). Prerequisites: Knowledge of probability and at least one programming language. 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 5140. Fault Tolerance and Reliability (3). Prerequisite: CDA 5155. Basic definitions; self-checking circuits; error detection measures; interconnection networks; test generation and testability; distributed fault tolerance systems; software fault tolerance; fault tolerance and VLSI; error recovery.

CDA 5155. Computer Architecture (3). Prerequisite: CDA 3101. 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 5000. Knowledge Management and Data Engineering (3). Prerequisite: COP 5710. A survey of techniques and tools representing the transition from database management to knowledge management; database architecture and models; fuzzy databases; construction of knowledge bases.

CEN 5035. Software Engineering (3). Prerequisites: CEN 4021, COP 4020, 4531. Survey of 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 5055. Project Development (3). Prerequisite: CEN 5035. This course deals with the planning, design, validation and implementation of a large scale project using IEEE deliverables, state-of-the-art software engineering techniques, and analysis and design project reviews and evaluations prior to implementation in the Graduate Software Project.

CEN 5064. Advanced Software Design (3). Prerequisites: CEN 5035. This course concentrates on the design of software systems after requirements engineering has been completed. The course offers education in techniques such as architectural design, pattern integration, and refactoring.

CGS 5267. Principles of Computer Organization (3). (S/U grade only.) Corequisites: COP 3330, MAD 2104. 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. 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, MAD 2104. Pre- or Corequisite: CDA 3100. 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. 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/1, 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 3107. Corequisites: STA 4442, 4321 or 3032. 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, MAD 2104. 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. 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, COP 4530. 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. Course may be repeated within the same term, to a maximum of three semester hours.

CIS 5370. Computer Security (3). Prerequisites: COP 4610. Topics in this course 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 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.) 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 (1). (S/U grade only.) Series of lectures given by faculty and visiting computer scientists. May be repeated up 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: Instructor permission. 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 5970r. Thesis (1-12). (S/U grade only.) A minimum of nine semester hours of credit is required for thesis option MS students.

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; COP4610. 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 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 5385. Reactive Systems and Hierarchical State Machines (3). Prerequisites: COP 4530, 4610. This course covers the theory of hierarchical state machines (HSM) and the use of HSM to model and implement reactive systems (RS). Implementations of HSM in C, C++, and Java are explored. HSM are applied for modeling and implementing RS, including real-time, multi-threaded, and embedded systems. Selected articles from the rapidly expanding literature and an advanced project are included. Permission of instructor required for students with credit for CEN 4xxx.

COP 5517. Generic Programming (3). Prerequisite: COP 4530. This course covers all fundamental aspects of generic programming, including generic algorithms, generic iterators, as well as function and predicate objects. Examples are drawn from the FSU and STD template libraries, while techniques for extending these support libraries are covered in the context of a template-graph library. Policy-based design is then used to create generic implementations of several design-pattern implementations, including singleton, smart pointer, and abstract factory.

COP 5570. Concurrent, Parallel, and Distributed Programming (3). Prerequisite: COP 4610. 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. Design principles of batch, multiprogramming, and time-sharing systems; distributed systems; problems of concurrency.

COP 5621. Compiler Construction (3). Prerequisites: CDA 3101; COP 4020; 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 will also be a number of significant programming projects in this course.

COP 5641. Kernel and Device Driver Programming (3). Prerequisites: COP 4610, 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 5642. RealTime Systems Theory and Practice (3). Prerequisites: COP 4610 or 5570. This course addresses the theoretical foundations and practical techniques for the design and implementation of real-time computer systems. Topics include applicable scheduling theory, the use of computers for controlling real-time processes and the use of real-time operating system. Laboratory work includes writing software to control a physical device with hard-timing constraints and analysis of scheduling performance by simulation. A term project and report are required.

COP 5725. Database Systems (3). Prerequisites: COP 4610, 4710. Use of a generalized database management system; characteristics of database systems; hierarchical, network, and relational models; file organizations.

COP 5818. Distributed Applications Development (3). Prerequisite: COP 3252. Programming of distributed Web applications using Java database connectivity, servlets, Java server pages, remote method invocation, and enterprise Java beans (both session and entity beans); use of the Sun Microsystems Java 2 Enterprise Edition development platform either directly or through an integrated development environment such as IBM's Websphere.

COP 6622. Advanced Topics in Compilation (3). Prerequisite: COP 5621. The 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; COT 4420. Formal models of computation; automata; formal languages, their relationships, decidable and undecidable problems.

COT 5315. Programming Language Foundations (3). Prerequisites: COP 4020; MAD 3105. Topics in this course include conceptual subtleties in programming languages; formal specification of syntax and semantics; and issues in the design and implementation of programming languages.

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 5410. Complexity of Algorithms (3). Prerequisites: COP 4531; COT 4420. Formal methods for the analysis of algorithm complexity, application to specific algorithms, lower bounds, asymptotically optimal algorithms, reducibilities, NP completeness, and other classifications of hard problems.

COT 5507. Analytic Method 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 5540. Logic for Computer Science (3). Prerequisite: COT 4420. Syntax, semantics, and proof theory of propositional logic and first order languages; prenex normal form; Gentzen systems; resolution for propositional logic; elements of PROLOG and program verification.

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, 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.

CAP 6417. Theoretical Foundations of Computer Vision (3). Prerequisite: CAP 5415. This course covers theoretical foundations of computer vision. By formulating vision as an inference process, approaches to vision are presented and analyzed systematically. Topics include Marr's computational vision paradigm, regularization theory, Bayesian inference framework, pattern theory, and visual learning theories.

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 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.)

COP 6622. Advanced Topics in Compilation (3). Prerequisite: COP 5621. The 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.

CIS 8962. Doctoral Qualifying Examination (0). (P/F grade only.) May be repeated twice at most.

CIS 8964. Doctoral Preliminary 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. Defense of Dissertation (0). (P/F grade only.)

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

CRIMINOLOGY AND CRIMINAL JUSTICE

COLLEGE OF CRIMINOLOGY AND CRIMINAL JUSTICE

Web Page: <http://www.criminology.fsu.edu/>

Professors: Bales, Baumer, Blomberg, Chiricos, Doerner, Gertz, Mears, Kleck, Maier-Katkin, Stewart; **Associate Professors:** Beaver, Coonan, Hay, Stults, Warren Hightower; **Assistant Professors:** Close, Siennick; **Professor Emeritus:** Kirkham, 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 master's degree programs 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.

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.

CJE 5024. Police and Society (3). 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.

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 5029. The Political Economy of Crime and Justice (3). This course examines theory and research in the relationship between economic structure, conditions and change, and the circumstances engendering both criminal behavior and attempts to control it.

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. Will include a discussion of the use of these technologies within the criminal justice system. Class will cover 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 5138. Science, Evidence and the Law (3). This course examines the philosophy of science, the procedures of the law, and the criteria required for results of scientific examinations to be admitted into a trial as evidence.

CCJ 5285. Survey of Criminal Justice Theory and Research (3). An overview of the theoretical issues and research on the law and legal control of deviance in society.

CCJ 5320. Penology (3). 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.

CJL 5420. Criminal Laws, Criminal Procedure and Individual Rights (3). The criminal justice system is based upon substantive and procedural criminal law. It is also a system of rights. This class considers the definitions and development of criminal law, criminal procedure and criminal rights, with special attention to constitutional theory and practice.

CCJ 5456. Criminal Justice Administration (3). This course is an application of organization and administration theories to the criminal justice system.

CJL 5520. Structure and Process of the American Court System (3). 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.

CCJ 5546. Prevention and Treatment of Crime and Delinquency (3). 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). 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). 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). An analysis of crime, delinquency, and victimization within various demographic and ecological systems of society. The course will focus on characteristics of offenders and offenses.

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 5704r. Introduction to Research Methods and Statistics (3). A basic introduction for graduate students to statistics and research methods as they are used in criminology. It is intended for students who have not had undergraduate courses in methods or statistics. May be repeated to a maximum of six semester hours.

CCJ 5705. Research Methods in Criminology I (3). 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). 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, 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.) 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, 5606, 5705, or 5706; or instructor permission.

CCJ 5946r. Criminal Justice Practicum (3-6). (S/U grade only.) Prerequisites: CCJ 5078, 5285, 5606, 5704; 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. The 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.) 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 6109r. Advanced Seminar in Criminological Theory (3). An examination of the conceptual, logical, and empirical adequacy of major criminological theories. May be repeated to a maximum of nine semester hours.

CCJ 6665. Victimology (3). Prerequisites: CCJ 5705, 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). 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 6741. Advanced Data Analysis in Criminology and Criminal Justice (3). A survey of advanced data analysis approaches used in criminological research. The course will generally cover problems of constructing indices and scales, procedures for analyzing limited dependent variable, structural equation models, models with latent variable and time series analysis.

CCJ 6920r. Seminar in Theoretical Criminology (3). Contents will vary as instructors present different developments, problems, and controversies. May be repeated to a maximum of nine semester hours as content varies.

CCJ 6980r. Dissertation (1-12). (S/U grade only.)

CCJ 8968r. Preliminary Examination Preparation (1–12). (S/U grade only.) Preparation 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.)

CRITICAL THEORY: see Critical Theory

Interdepartmental Certificate Program in CRITICAL THEORY

COLLEGE OF ARTS AND SCIENCES

Web Page: http://www.english.fsu.edu/crit_theory/index.html

Director: Barry J. Faulk, Department of English

Critical theory is an interdisciplinary pursuit actively sought by scholars, both nationally and internationally. This endeavor touches all disciplines to some extent; the areas most involved to date include the national literatures, humanities, classics, philosophy, religion, history, the social sciences, the visual arts, and the performing arts. A positive result of contemporary critical theory has been to challenge the fundamental boundaries separating the academic disciplines. Theoretical speculations necessarily cross disciplines because investigative methods utilize a variety of disciplines. The Interdepartmental Certificate Program in Critical Theory provides an opportunity for students to work within a multidisciplinary structure and explore elements of theory that will enhance their major areas of study.

Admission Requirements

Any student who has been admitted to graduate study at Florida State University as a regular or non-degree seeking student may apply for admission to this certificate program by a letter to the director of the certificate program outlining the student's background and interest in certification. The student will then design a program of study in consultation with a faculty member in the program. The student will submit to the director a list of potential courses to satisfy the requirements listed below, approved by either the major professor for the student's graduate degree program or a professor who is a member of the certificate group.

Admission to the program is dependent on approval issued by the director of the program in consultation with the student's faculty adviser. This is not a degree program and does not satisfy the requirements of a graduate degree program. The certificate will only be awarded at the completion of a graduate degree.

Requirements

The student must complete eighteen semester hours of coursework, including two topics seminars designed to meet the needs of students working in the interdisciplinary field of critical theory. Check with the director for the seminar prefix and section number each semester that fulfills the Topics Seminar requirement. In addition to these two seminars, the student must take twelve semester hours of coursework from approved courses such as the samples listed in Area II below. At least one of these courses should be an introductory survey or methods course within the student's particular discipline.

The course of study must be completed with a "B" (3.0) average or better and with no grade below a 2.0. The certificate will culminate in a paper prepared for publication, revised from coursework used for certification, and an oral presentation. Students will work in conjunction with their advisers on this project and will identify several journals and periodicals to which their papers may be submitted. The paper and evidence of coursework will then be submitted to the director who will confer a certificate at the student's completion of a graduate degree at Florida State University.

Note: A course required for a degree program can also be used to satisfy the certificate program. Required coursework outside of a student's degree program will therefore vary according to the specific course chosen and overlaps in requirements.

Area I: Topics Seminars

HUM 6939r Seminar Topics [Seminar in Interdisciplinary Theory] (3)

Area II: Sample Listing of Courses in Critical Theory

ARH 5795 Seminar in the Methods of Art History (3)

ARH 5896r Seminar in the History and Criticism of Art (3)

DAN 5128 Theory of Dance (3)

ENG 5049r Studies in Critical Theory (3)

EUH 5608 European Intellectual History, 1500–1800 (4)

EUH 5609 European Intellectual History, 1800 to the Present (4)

FRW 6829r Seminar in Literary Criticism (3)

PHI 6808r Aesthetics (3)

THE 5506 Seminar: Dramatic Theory and Criticism 20th Century (3)

THE 5541 Seminar in Theatrical Theory: The Tragic Dramatic Form (3)

THE 6272 Seminar: Theory and History of Acting (3)

THE 6531 Methods of Theatre Criticism (3)

For Area I, only one designated course per semester satisfies the topics seminar requirement. For Area II, the list of applicable courses is determined by the steering committee, dependent on the course content and general direction. The candidate should check with the program director for guidance.

Note: Descriptions of the preceding courses can be found under the departmental listings.

School of DANCE

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Web Page: <http://dance.fsu.edu/>

Co-Chairs: Patricia Phillips, Russell Sandifer; **Professors:** Farrell, Fichter, Houlihan, Morgan, Phillips, Sandifer, Sommer, Wagoner, Welsh, Young, Zollar; **Associate Professors:** Austin, Corbin, Glenn, Humphreys, McCullough; **Assistant Professor:** Atkins; **Associates in Dance:** Calienes, Fausone

The School of Dance offers work leading to the Master of Fine Arts (MFA) degree in dance, the Master of Arts (MA) degree in dance with a major in studio and related studies, and the Master of Arts (MA) degree in American dance studies. Currently these are the only graduate dance programs in Florida. Graduate study in dance began at Florida State University in the mid-1960s, and over the decades has continued to develop its mission: to provide work leading to the Bachelor of Fine Arts (BFA), the Master of Fine Arts (MFA), and the Master of Arts (MA) degrees in dance. 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 MFA in dance program is choreography and performance, and the curriculum for each candidate culminates in a graduate thesis concert fully produced in The Nancy Smith Fichter Dance Theatre. The creative component of the degree program is complemented by required work in dance history and criticism theory, dance science, and dance technology.

The emphasis of the Master of Arts in Dance with a major in Studio and Related Studies is significant investigation into one or more of the diverse areas within the field of dance that extends beyond the traditional studio practices of performance and choreography as defined by the dance profession in a broad sense. This degree is ideal for the pre-professional or returning professional with a clear vision of how they hope to contribute to the field of dance upon graduation. The focus of the major may include, but is not limited to: dance administration, community engagement, dance science, dance production design, and dance technology.

The emphasis of the MA degree in American dance studies is on the preparation of the scholar. This is a unique program based in research that investigates a wide range of dance practices, from the vernacular and religious to stage forms. The major focus is on American dance forms that are used as a lens to illuminate the deeper background of the inter-textual culture that shapes American art. As the integration of theory and practice enhances both art-making and academic inquiry, the student is encouraged to take advantage of the rich array of courses offered across the curriculum.

Visiting artists, guest choreographers, an outstanding dance lecture series and film series are regular enhancements of the curriculum. An ongoing performance and repertory project brings outstanding dance masterworks to campus for performance by the Florida State University dancers, linking the artistic and technical development of dancers to their understanding of the cultural and historical context of the art. The recently established Maggie Allesee National Center for Choreography, a dance and choreographic research center affiliated with the School of Dance, also hosts numerous internationally recognized dance artists.

The Florida State University School of Dance 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 candidate 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. Careful scrutiny will be given to any candidate who does not meet either of the following two University admission requirements: 1) a minimum of 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; or 2) a score on the verbal and quantitative portions of the general aptitude test of the Graduate Record Examination. See or call the School for the current required score. If a 3.0 GPA has been attained, the GRE is not required as the audition, interview,

and writing samples provide alternate methods of assessing qualifications for admission. The student's progress is assessed continuously throughout the graduate program. Specific 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. A student who cannot meet the school proficiency standards will be discontinued from the dance major program. The amount of work required, in addition to the minimum dance curricular requirements and the minimum University-wide requirements, depends upon the student's undergraduate preparation and level of achievement.

The graduate student in dance is expected to maintain continuous participation at the appropriate level in ballet and contemporary dance classes and must achieve designated proficiency levels required for graduation.

The MFA Returning Professional Track allows the career dance artist to design a curriculum that will enhance and augment current skills, deepen existing knowledge, and provide opportunities for exploring new areas of interest. Requirements for the Returning Professional Track are:

1. Minimum of seven years in a national or internationally prominent dance company;
2. Demonstrated choreographic or and/or restaging experience with established dance repertory;
3. Demonstrated maturity and commitment to the field of dance;
4. Ongoing engagement and currency in the field of dance.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Summary of Minimum Requirements

The MFA degree in dance requires a minimum of sixty-six semester hours, normally constituting a three-year course of study. This minimum must contain fifty-nine semester hours of dance courses, including twenty-two semester hours of technique, three semester hours of seminar in dance history and research, twenty-eight semester hours of specified theoretical and studio courses, and six semester hours in a final project (creative thesis: graduate concert) in choreography and/or performance. The student must earn seven semester hours in electives. Expertise in any of the subject areas and/or proficiency in technique may allow individual candidates the option of designing a course of study which is tailored to the candidate's research, performance, or production interests. This will be done in consultation with the graduate faculty.

1. **Dance Technique:** Twenty-two semester hours and fulfillment of proficiency requirement. To meet graduation requirements, the student must achieve and maintain the ballet III level and the contemporary dance II level or the contemporary dance III level and the ballet II level; the advanced proficiency level (III) must be achieved by one semester prior to graduation.
2. **Seminar:** Studies in Dance History and Research, Three semester hours: DAN 5191.
3. **Other Dance Courses:** Twenty-Eight 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 Technique, three semester hours; DAA 5648 Choreographic Project, four semester hours; DAN 5508 Visual Design for Choreography, three semester hours; Dance history, with specific courses to be selected in consultation with adviser, three semester hours; DAA 5688 Dance Ensemble, three semester hours; DAE 5305 Science of Dance Training, three semester hours; and DAN 5590 Studies in Dance Technology, three semester hours.
4. **Final Project in Choreography and/or Performance:** Six semester hours: DAN 5972 (creative thesis: graduate concert). All MFA candidates must fulfill a prerequisite by performing or understudying in at least one choreography or restaging produced by graduate faculty or commissioned guest artist before producing his/her own creative thesis. Any exceptions to this prerequisite will be determined by the graduate adviser in consultation with the graduate faculty.
5. **Electives:** Seven semester hours.

Total: Sixty-six semester hours.

Comprehensive Examination

To fulfill graduation requirements, the successful completion of a final examination is required: DAN 5960r.

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. Careful scrutiny will be given to any candidate who does not meet either of the following two University admission requirements: 1) a minimum of 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; or 2) a score on the verbal and quantitative portions of the general aptitude test of the Graduate Record Examination. See or call the School for the current required score. If a 3.0 GPA has been attained, the GRE is not required as the audition, interview, and writing samples provide alternate methods of assessing qualifications for admission. The student's progress is assessed continuously throughout the graduate program. Specific 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. A student who cannot meet the school proficiency standards will be discontinued from the dance major program. The amount of work required, in addition to the minimum dance curricular requirements and the minimum University-wide requirements, depends upon the student's undergraduate preparation and level of achievement.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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 eleven semester hours of technique, three semester hours of seminar in dance history and research, five semester hours of choreography and choreographic project, and two to three credit hours of directed individual study (capstone experience). Additionally, the student must earn fifteen semester hours of elective courses in studio related courses. Elective courses must be approved by the student's adviser. Students are required to investigate possibilities for elective courses 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 contribution to the field of dance upon graduation. Individual programs are planned by the student with approval of the student's faculty adviser. Students must achieve at least an intermediate proficiency level in either ballet or contemporary dance technique. Students must develop an appropriate capstone experience that substantively synthesizes their unique curricular experience. The capstone project must meet the approval of the graduate adviser and the graduate faculty mentoring the candidate's individual program.

Requirements for a MA in American Dance Studies

The MA in American dance studies degree candidate 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. A score on the verbal and quantitative portions of the Graduate Record Examination or a 3.0 undergraduate grade point average is required for admission. See or call the School for the current required GRE score. 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 assessed continuously throughout their 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 student's undergraduate preparation.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Summary of Minimum Requirements

The MA in American dance 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 twenty-four semester hours of required courses, including three semester hours of seminar in dance history and research, nine semester hours in American dance history, three semester hours in theory of dance, and three semester hours in special topics in dance, and six semester hours of thesis work. Additionally, the student must earn twelve semester hours of electives courses outside the School of Dance (e.g. in American and Florida studies, history, African American studies, women's studies, humanities, music, theatre, art history.) The student is required to include some movement experience in his or her degree program. The kind and scope of practical work will vary from student to student 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) Completing twelve semester hours of college level foreign language, Labanotation, or Laban Analysis (Effort-Shape) with a 3.0 ("B") average; 3) Four years of a single language at the high school level; 4) Achieving an intermediate level certification in Labanotation or Laban Analysis. Credit for foreign language courses may not be counted toward elective requirements.

1. **Seminar:** Studies in Dance History and Research, Three semester hours: DAN 5191.
2. **Dance History:** History of American Dance 1492–1892, History of American Dance 1892–1960, History of American Dance 1960–2000, three semester hours each to total nine semester hours: DAN 5147, DAN 5148, DAN 5149.
3. **Theory of Dance:** Three semester hours: DAN 5128.
4. **Special Topics in Dance:** Three semester hours: DAN 5930.
5. **Masters Thesis in Dance History:** Six semester hours: DAN 5973.
6. **Master Thesis Defense:** Zero semester hours: DAN 8976
7. **Electives:** Twelve semester hours.

Total: Thirty-six semester hours.

Comprehensive Examination

To fulfill graduation requirements, the successful completion of a final examination is required: DAN 5960r.

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). Faculty placement or instructor permission required. May be repeated to a maximum of eighteen semester hours.

DAA 5218r. Ballet (1–3). Faculty placement or instructor permission required. May be repeated to a maximum of eighteen semester hours.

DAA 5618. Choreography (3). Study of aesthetic issues in choreographic process; development and critical analysis of choreographic etudes; delineation of prospectus for extended choreography.

DAA 5648r. Choreographic Project (2–6). (S/U grade only.) 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.) 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). 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 5126. 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 5128. Theory of Dance (3). 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. History of American Dance 1492–1892 (3). A course of study covering the evolution of American dance history from 1492–1892. A maximum of three semester hours may apply toward the master's degree.

DAN 5148. History of American Dance 1892–1960 (3). A course of study covering the evolution of American dance history from 1892–1960. A maximum of three semester hours may apply toward the master's degree.

DAN 5149. History of American Dance 1960–2000 (3). A course of study covering the evolution of American dance history from 1960–2000. A maximum of three semester hours may apply toward the master's degree.

DAN 5158. Theory of Dance Performance and Directing (3). Previous technical experience preferred. Study of historical development and theoretical bases of performance and directing.

DAN 5190. Theory and Practice in Dance Technique (3). 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 Studies in Dance History and Research (3). 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). 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). 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 5508. Visual Design for Choreography (3). 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 (3). 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 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. May be repeated to a maximum of nine semester hours.

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 will be developed by the student and intern host in consultation with the academic adviser. 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 5972r. Creative Thesis: Graduate Concert (2–6). (S/U grade only.) This course is for MFA degree candidates in dance only. The development and production of the graduate concert. May be repeated to a maximum of nine semester hours. A minimum of six semester hours is required.

DAN 5973r. Master's Thesis in American Dance Studies (1–6). Prerequisite: DAN 5791. 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 adviser.

Center for DEMOGRAPHY AND POPULATION HEALTH

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://popcenter.fsu.edu>

Director: Karin L. Brewster (Sociology); **Professors:** Carlson (Sociology), Eberstein (Sociology), Miles (Urban and Regional Planning), Schmettmann (Economics); **Associate Professors:** Brewster (Sociology), J. Taylor (Sociology), Tillman (Sociology); **Assistant Professors:** Burdette (Sociology), Coutts (Urban and Regional Planning), M. Taylor (Sociology); **Professors Emeriti:** Nam, Sly, Turner

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, 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 also cooperates in the graduate programs of departments in the College of Social Sciences and Public Policy, wherein candidates for 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.

Each year, the Center awards the **William Serow Prize**, a scholarship providing financial support, to an outstanding student in the master's degree in demography program. The Center maintains its own computer laboratory and library facilities, which are available to students in the master's program and which support the Center's research and training activities. Faculty members maintain active research programs and frequently invite students to participate in all phases of research projects. Faculty members also serve as consultants to national and international agencies and as officers or directors of professional organizations in demography and allied fields.

Requirements

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 midlevel 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, and three hours of elective courses approved by the director. In addition, each student must complete a master's research paper (six semester hours) in order to receive the master's degree. A minimum of thirty-three semester hours are 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 under the departmental listings and at <http://popcenter.fsu.edu>.

Required Core

Twenty-four semester hours:

1. Three semester hours of ECO 5936 (Special Topics - Population Data) or SYA 6933 (Selected Topics in Sociology - 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. Six semester hours of ECP 5115 (Seminar in the Economics of Population), SYD 5045 (Introduction to Demography), SYD 5046

(International Population Dynamics), SYD 5215 (Health and Survival), SYD 5225 (Fertility), SYD 5235 (Population Mobility), SYD 5105 (Population Theory), or SYO 5177 (Changing Families);

6. Six semester hours of ECO 5420 (Basic Applied Econometrics), SYA 5305 (Introduction to Research Methods), SYA 5406 (Multivariate Analysis), or URP 5211 (Planning Statistics).

List of Graduate-Level Courses for Demographers

DEM 5930r	Special Topics in Demography (3)
DEM 5972r	Master's Research Paper in Demography (3-6) (S/U grade only.)
ECO 5425	Advanced Quantitative Methods II (3)
ECO 5936r	Special Topics (1-3)
ECP 5115	Seminar in the Economics of Population (3)
ECP 5117	Mathematical Demography (3)
ECP 5536	Seminar in Health Economics (3)
ECS 5015	Economic Development: Theory and Problems (3)
GEO 5472	Political Geography (3)
GEO 5545	Advanced Economic Geography (3)
GEO 5934r	Seminar in Current Topics (1-3)
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 5105	Population Theory (3)
SYD 5135	Techniques of Population Analysis (3)
SYD 5136	Life Course Epidemiology (3)
SYD 5137	Fundamentals of Epidemiology (3)
SYD 5145	Population Policy (3)
SYD 5215	Health and Survival (3)
SYD 5225	Fertility (3)
SYD 5235	Population Mobility (3)
SYO 6407	Race, Ethnicity, and Health (3)
URP 5261	Forecasting for Plan Development (3)
URP 5272	Urban and Regional Information Systems (3)
URP 5530	Policy and Planning for the Aging (3)
URP 5544	Gender and Development (3)
URP 5614	Population and Development Planning (3)

DEMOGRAPHY AND AREA STUDIES:
see also Middle and Secondary 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

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.eoas.fsu.edu/>

Chair: Lynn M. Dudley; **Professors:** Barron, Burnett, *Cai, Chanton, Chassignet, Clarke, Dewar, Dudley, Ellingson, Froelich, Fuelberg, *Hu, Huettel, Humayun, Kostka, Landing, Liu, MacDonald, Marcus, Nicholson, Nof, Odom, Ray, Salters, Speer, Thistle, Tull, Wise, *Zou; **Associate Professors:** Ahlquist, Arnold, *Bourassa, *Clayson, Donoghue, Hart, Kish, Parker, *Ruscher; **Assistant Professors:** Baco-Taylor, Farris, Misra, Sura, Wu; **Professors Emeriti:** Barcion, Hsueh, *Krishnamurti, Gleeson, LaSeur, Long, Loper, *O'Brien, Pfeffer, Staley, Stern, Sturges, Weatherly, Winchester
* Also Associate, Geophysical Fluid Dynamics Institute

Earth, Ocean, and Atmospheric Science

In 2010, the departments of Geological Sciences, Oceanography, and Meteorology merged to form Earth, Ocean, and Atmospheric Science creating new opportunities for undergraduate and graduate education in the geosciences. The department provides students with an opportunity for holistic study of the Earth's physical environment. 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 19% increase in geoscience-related occupations between 2006 and 2016, which is 9% 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 department also stresses teaching the necessary skills for those who choose to obtain the MS degree.

The geology program began in 1949, and the Carraway Building, the department's home, was completed in 1953 and renovated in 1998. The PhD program was initiated in the early 1960s. Faculty interests encompass many specialties, including, geochemistry, micropaleontology, marine geology, hydrogeology, sedimentology and coastal processes, geomorphology, structure and tectonics, seismology, geochronology, petrology, soil sciences, and environmental geology.

Both geology majors and those from other disciplines with a strong background in natural sciences may enter the program, with an emphasis on studies pertinent to their interests. Research programs may be conducted within the department, 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. Earth, Ocean, and Atmospheric Science 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 provides a service to the international geological community, funded by the National Science Foundation (NSF), by maintaining a repository for marine cores in the Antarctic Research Facility.

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, automated X-ray diffraction equipment, 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, microcomputers, 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 this department have outstanding records in both government and industry. In Florida, large numbers of the department's graduates are employed by the Water Management Districts of the state, the Department of Environmental Protection, the Florida Geological Survey, the United States Geological Survey, phosphate and clay mining companies, and numerous geologic and engineering consultant companies. Outside the state, a large number

of graduates hold scientific and executive positions with major petroleum and mining companies. 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 *Department of Geological Sciences Graduate Handbook*.

Admission Requirements

Admission to the graduate program requires a score of 1000 (verbal and quantitative) on the aptitude test of the Graduate Record Examinations (GRE) and a score of at least 400 on each portion, or an undergraduate grade point average (GPA) of 3.0. International students whose native languages are other than English are also required to achieve a score of 550 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).

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

A beginning graduate student should normally have preparation equivalent to that required for a baccalaureate degree, preferably in the natural sciences.

Master's Degree Requirements

Earth, Ocean, and Atmospheric Science offers only the thesis-type program for the master's degree in geology. In addition to the number of bound copies required by the University, one copy must be provided to the department, the binding of which shall meet American Library Association standards.

Coursework appropriate to the needs of the individual student should be arranged with the graduate student adviser or with the major professor and the supervisory committee. One semester per year of seminar (GLY 5931r) also is required.

A thesis adviser 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. For admission to candidacy, students must present to the supervisory committee and publicly defend a description of proposed thesis research (prospectus). In addition, students must demonstrate, by means of a comprehensive examination taken by the end of the third semester, professional proficiency in general geology as well as their area of specialty. The examining committee will normally be comprised of the student's advisory committee, designated by the department chair. During the term that this exam is scheduled, the student must enroll for GLY 8966r, Master's Comprehensive Examination.

Doctor of Philosophy (PhD) Degree

The Doctor of Philosophy degree is based on satisfactory completion of required coursework, broad scholarship built on wide and critical reading, capacity for independent thought, and ability to do original and independent scholarly work. In addition to the number of bound copies required by the University, one copy of the dissertation must be provided to the department, the binding of which shall meet American Library Association standards. 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. 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 general geology, as well as their area of specialty. The 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 received the Nansen Medal from the European Geosciences Union.

Current research projects are funded by the National Science Foundation, NASA, U.S. Department of Energy, Florida Department of Environmental Regulation, Office of Naval Research, and the National Center for Atmospheric Research. These include ocean modeling with supercomputers, direct observations of ocean currents with current meters, analysis of environmental pollution, and studies of microbial and zooplankton populations, and benthic ecology.

Frequently utilized external resources include the marine laboratory at Turkey Point, 45 miles away from Tallahassee on the Gulf of Mexico; the Department of Scientific Computing; 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. A large current-meter facility is operated by the department. Extensive use is made of the University-National Oceanographic Laboratory System (UNOLS) fleet as well as the R/V Bellows and R/V Suncoaster berthed in St. Petersburg. The University's oceanography students and professors frequently board UNOLS vessels on 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*.

The MS and the PhD degrees in oceanography are offered with specialties in biological, chemical, geochemical, and physical oceanography. Interdepartmental studies, for example, atmospheric chemistry, air-sea interaction, and geophysical fluid dynamics, are arranged within Earth, Ocean, and Atmospheric Science or in cooperation with the Departments of Biological Sciences, Chemistry and Biochemistry, Mathematics, Physics, Statistics, and the Geophysical Fluid Dynamics Institute. There is also a non-thesis master's in Aquatic Environmental Science.

As a minimum standard, a "B" average is expected in all undergraduate classes, and a total score of 1100 combined verbal and quantitative on the Graduate Record Examinations (GRE) aptitude test is required of all applicants. Current enrollment trends indicate that a record considerably above the minimum is necessary to assure admission to the limited number of places available.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

The paragraphs below suggest the proper preparation for each of the four areas of specialization in oceanography.

Graduate Certificate Program in Oceanography

Earth, Ocean, and Atmospheric Science offers a graduate certificate program in oceanography for students in their senior year of undergraduate study in a science, math, or engineering program, or anyone who holds a bachelors degree in a relevant field (e.g. biology, chemistry, engineering, geology, mathematics, meteorology, physics). Applicants must have a 3.0 GPA; however, no standardized test scores are required.

This program offers an introduction to the interdisciplinary field of oceanography to enrich a student's background for professional work or as a precursor to graduate study leading to a degree. Program coursework is recorded on the student's official university transcript and provides an educational credential that documents the additional training the student has received. To earn a graduate Certificate in Oceanography, students must complete fifteen semester hours of coursework, including the writing of a research paper. The program of study must include two courses from the Core Curriculum; electives selected from the graduate level offerings in the department, and supervised research in the final semester.

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 upon human activities. It is intended for students whose career goals do not include the pursuit of scientific research.

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 a total score of 1100 combined verbal and quantitative on the Graduate Record Exam. The program is course-based, and includes a capstone experience. 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 Earth, Ocean, and Atmospheric Science or in other scientific disciplines as the individual's interest and capstone experience paper dictate.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

If an AES student is admitted to the department for a research-based master's in Oceanography, his or her supervisory committee decides on a case by case basis if any courses taken for the master's in Aquatic Environmental Sciences can be applied to the Oceanography degree requirements.

General Undergraduate Preparation

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 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, 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, tropical circulations, turbulence, vortex dynamics, climate prediction, global warming, climate change, 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.

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 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 earned the U.S. Department of Energy Distinguished Associate Award; Dr. Nicholson has

received the Hugh Robert Mill Medal from the Royal Meteorological Society; Dr. Clayton received the Presidential Early Careers award for Scientists and Engineers; 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 workstations and microcomputers within the department, including SUN, Silicon Graphics, IBM, Apple and IBM PCs, and PC clones. An advanced meteorological computing laboratory is available to graduate students in the department. Florida State University also has state-of-the-art supercomputing facilities on campus, accessible by both faculty and students.

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.

The EXPLORES! educational outreach program and the Center for Ocean-Atmosphere Prediction Studies (COAPS) were formed within the department in the 1990s. These programs focus on faculty interactions with science teachers, operational meteorologists, and other researchers in exciting new fields of research. Our department is one of the few in the country where a National Weather Service Forecast Office is located in the same building as the meteorology faculty, which facilitates interactions between students and professional operational forecasters.

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 FORTRAN 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 1100 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. Fellowships and assistantships are available to well-qualified applicants; three letters of recommendation are required.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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.

Doctoral Degree Program

Candidates may specialize in many areas including dynamical, physical, synoptic meteorology, or climatology. Specialization in marine meteorology and air-sea interaction may also be arranged.

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

MAP—Mathematics Applied

MET—Meteorology

OCB—Biological Oceanography

OCC—Chemical Oceanography

OCE—General Oceanography

OCG—Geological Oceanography

OCP—Physical Oceanography

Geology Graduate Courses

ESC 5211r. Current Topics in Earth Science (3). 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.

ESC 5215r. Current Topics in Earth Science (3). An overview of recent advances in earth sciences, for secondary school earth science teachers. May be repeated to a maximum of six semester hours. May not be taken for major credit in earth science.

GLY 5135. Quaternary Geology (3). This course will examine the following subjects: geochronology; paleomagnetism; other nonchronometric dating methods; causes of climate change; alluvial and marine terraces; mean sea-level history; gravity and isostasy (including post-glacial rebound); ice deposits; causes of ice ages.

GLY 5265. Nuclear Geology (3). Prerequisite: GLY 4240 or equivalent. 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). 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). 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). 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. 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. 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. 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 will be 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. Special topics, on demand, in geophysics. May be repeated to a maximum of six semester hours.

GLY 5497r. Advanced Topics in Structural Geology (3). 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. 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 5556. Hydrodynamics (3). Prerequisites: MAC 2312 and PHY 2048C. The dynamics of flowing water on and near the earth's surface; porous-media flows and boundary flows as they pertain to geologic phenomena.

GLY 5573. Fluvial Processes (3). Prerequisites: Calculus III, physics B. Fluvial hydrology, sediment movement, and channel evolution.

GLY 5575. Coastal Geology (3). Topics in this course 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. 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). 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). Taxonomy, ecology, and paleoenvironmental aspects of selected microfossils with emphasis on foraminifera.

GLY 5625C. Advanced Micropaleontology (3). Biostratigraphic and evolutionary studies with emphasis on smaller foraminifera.

GLY 5695r. Advanced Topics in Paleontology (1–3). Special topics, on demand, in paleontology. May be repeated to a maximum of six semester hours.

GLY 5696Cr. Mesozoic Planktonic Calcareous Nannofossils (4–8). 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). 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). Shoreline, shelf, and deep ocean processes; marine sediment types and sedimentary environments; plate tectonics; origin of the ocean; paleoceanography; marine mineral resources. 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. 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 5825. Physical Hydrology (3). Prerequisites: GLY 5827, MAC 2312, and PHY 2048. An introductory treatment of the physical processes and geological constraints that govern the occurrence and movement of subsurface waters. Emphasis is placed on how water movement is conditioned by fluid, soil and rock properties; and by topographic, stratigraphic, and structural boundaries.

GLY 5826. Numerical Modeling of Groundwater Flow (3). Prerequisite: GLY 5825. Fundamental equations of groundwater flow. Introduction to finite difference and finite element methods for groundwater modeling. Numerical solutions for steady state and transient flow problems. Introduction to multiphase dispersive flow of contaminants in groundwater.

GLY 5827. Principles of Hydrology (3). Prerequisites: Basic chemistry and basic physics (for science majors). Fundamentals of hydrogeology with emphasis on groundwater flow and hydrochemistry. Both theory and applications are addressed.

GLY 5885. Geologic Hazards Assessment (3). 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). 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). 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 (3). (S/U grade only.) May be repeated for a maximum of nine 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.)

Oceanography Graduate Courses

Core Curriculum

OCB 5050. Basic Biological Oceanography (3). Introduction to the organization of benthic and planktonic communities in the ocean.

OCC 5050. Basic Chemical Oceanography (3). Prerequisite: CHM 1046. The chemical composition of seawater, carbon dioxide system, nutrients, trace elements, biogeochemistry.

OCG 5051. Basic Geological Oceanography (3). Structural and oceanographic setting of continents and ocean basins, plate tectonics, ocean margins, marine sediments, and ocean history.

OCP 5050. Basic Physical Oceanography (3). Prerequisite: MAC 2311. Seawater properties, currents, waves, tides, and acoustics. Not open to students in physical oceanography option.

Biological Oceanography

OCB 5015. Marine Nekton: Larval Fish to Whales (3). Prerequisites: BSC 2011, 2011L; PCB 3743 or 4674. This course provides an overview of marine nekton, including bony and cartilaginous fishes, cephalopods, reptiles and mammals. It covers the taxonomy, anatomy and functional morphology and physiology of these groups, including aspects of their relationships with humans.

OCB 5565. Marine Primary Production (3). Factors that affect the biomass production and spatial distribution of phytoplankton, seagrasses, and macroalgae in the ocean will be described. The key role of marine primary production in the global carbon cycle will be explained.

OCB 5600. Biological Fluid Dynamics (3). (S/U grade only.) Prerequisite: Algebra. Designed to introduce biological oceanography and biology graduate students to the consequences of fluid flow for biological systems. The text, Vogel's *Life in Moving Fluids*, is supplemented by movies, problem sets, and demonstrations. Students will present a chapter from the text plus supplementary material at each meeting.

OCB 5636. Marine Microbial Ecology (3). The diversity, distribution and roles of marine microbes, whose members include viruses, bacteria, archaea and protists, will be 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. 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; OCC 5050. 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; OCP 5050. Corequisite: CHS 4100C. Application of radiochemistry and stable isotope geochemistry in the oceanographic and environmental sciences.

OCC 5415. Marine Geochemistry (3). Prerequisite: OCC 5050. Introduction 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; OCP 5050. Mixing models and processes affecting dissolved concentrations and distributions of chemicals and radiotracers in the world's oceans.

OCC 5554. Atmospheric Chemistry (3). Prerequisites: CHM 4410; OCP 5050; OCC 5050. Formation and transport of atmospheric trace gases and aerosols.

OCG 5457. Stable Isotopes as Tracers in Aquatic Ecosystems (3). Prerequisites: A 1000 level or higher course in chemistry and a course in mathematics. The course will discuss the notation, fractionation effects, laboratory techniques and application of stable isotopes to aquatic ecosystems. Discussions will include applications for stable isotope tracing techniques for deep-sea sediments, estuaries and wetlands. Their uses extend from revealing climatic history to variations in food web dynamics.

OCG 5664. Paleoceanography (3). This course examines the paleochemical 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: PHY 3048C, MAP 4153; Corequisite: MAP 4341, 5345, or instructor permission. Physical properties of viscous fluids, kinematics of flow fields, governing equations, viscous flow. Dynamics of viscous incompressible fluids, vorticity, boundary layer flow, potential flow.

MAP 6434r. Advanced Topics in Hydrodynamics (2). 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: PHY 2049C, MAP 2302, or instructor permission. 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. Topics included are: 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. 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. 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. Large-scale ocean dynamics and observations. Linear theories. Classical nonlinear theories. Ventilated-thermocline model and applications. Relation of thermocline to ocean circulation.

OCP 5271. Turbulence (3). Prerequisite: OCP 5253. Turbulent transport of momentum and heat; dynamics of turbulence; homogeneous isotropic turbulence; wall bounded shear flows; statistical description of turbulence; spectra. Also offered by the Department of Meteorology.

OCP 5285. Dynamic Oceanography (3). Prerequisite: OCP 5056. Currents with friction, effects of turbulence, thermohaline circulation, waves.

OCP 5551. Physics of the Air-Sea Boundary Layer (3). Prerequisites: OCP 5285, MET 4302; or instructor permission. 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.) Meets weekly 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 5419C. Advanced Biogeochemistry: Field Methods and Concepts (3). Prerequisites: BSC 2010; CHM 1046. This course teaches a hands-on approach for the elucidation/quantification of environmental parameters and microbial processes and provides students with a tool kit of relevant field and lab techniques which may be used in a variety of environmental settings.

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.) Meets weekly 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.)

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.) Meets weekly 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

OCE 5009. Advanced General Oceanography (3). An overview of geological, physical, chemical, and biological oceanography. The major hypothesis in each subdiscipline will be described. Cross-linkages between sub-disciplines will be 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). Taught at an introductory level, this class 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 5554. Habitable Planet (3). This course provides an introduction to the origin and evolution of planet Earth, creation of the universe and the elements, early history of earth, radioisotopes and the timing of events in the universe, galaxy and on Earth. Formation of atmospheres and oceans. Climate. Life. Evolution, Geologic History.

OCE 5934r. Capstone Experience (3). Prerequisite: instructor permission. Exploration of 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.)

OCG 5106. The Earth System (3). This course examines the modern approach to understanding Earth's climate history and climate change on a global scale.

Meteorology Graduate Courses

Dynamical Meteorology

MAP 5431. Introduction to Fluid Dynamics (3). Prerequisites: PHY 2048C, MAP 4153. Corequisites: MAP 4341, 3306, 5345, or instructor permission. Physical properties of viscous fluids, kinematics of flow fields, governing equations, viscous flow. Also offered by the departments of Mathematics and Oceanography.

MAP 6434r. Advanced Topics in Hydrodynamics (3). Also offered by the departments of Mathematics and Oceanography. May be repeated to a maximum of eighteen semester hours.

MET 5311. Advanced Dynamic Meteorology I (3). Prerequisites: MAP 4341 or 3306; PHY 2049C. 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. 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 5312. 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.

MET5406. 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 5311. 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. Shallow water theory, Poincare, Kelvin, and Rossby waves; boundary layer theory; wind-driven ocean circulation models; quasi-geostrophic motion on a sphere, thermocline problem; stability theories. Also offered by the departments of Mathematics 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. 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. 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, 2049C. Classical equilibrium thermodynamics. First and second law, entropy, phase changes, and potentials. Physics of moist air. Physics of aerosols. Condensation of water vapor on aerosols.

MET 5451. Advanced Physical Meteorology II (3). Prerequisite: MET 5425 or equivalent. 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, 4450, or instructor permission. Microphysics of clouds. Development of warm and cold rain processes; hail formation, microphysical parameterizations, microphysical basis for weather modification and electrification.

MET 5471. Planetary Atmospheres (3). Prerequisites: MET 4450; MET 4302 or 5312, or instructor permission. 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, 5425. 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, 5420, 5500C; STA 2122. Synoptic calculation and four-dimensional analysis of weather systems.

MET 5510C. Midlatitude Synoptic Scale Systems (4). Prerequisite: MET 4501C or instructor permission. Lecture-laboratory on the structure and dynamics of middle-latitude atmospheric systems.

MET 5511C. Meso-Meteorology Lecture Laboratory (4). Prerequisite: MET 4501C. Structure and dynamics of mesoscale atmospheric systems.

MET 5533. Tropical Meteorology I (3). Prerequisite: MET 4501C. Lecture-laboratory on planetary and synoptic-scale systems of the tropics including hurricanes.

MET 5534. Tropical Meteorology II (3). Prerequisite: MET 4501C. 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. Examines global climate system from radioactive and surface exchange processes. Their role in climate dynamics and climatic change is considered.

MET 5135. Dynamic Climatology (3). Prerequisite: Basic climate course or instructor permission. 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 6155r. Advanced Topics in Climatology (1–3). Prerequisite: Instructor permission. 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; 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.

MET 5403C. Meteorological Instruments and Observations (3). Prerequisites: MET 2700; PHY 2048C. Course covers the theory and practice of calibration and operation of basic sensors measurement of temperature, heat flow, fluid flow, pressure and moisture.

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 5920r. Colloquium: Topics in Meteorology Research (1). (S/U grade only.) Prerequisite: Instructor permission. Reports and discussions in selected topics of meteorology research. May be repeated to a maximum of twenty (20) semester hours.

MET 5930. Master's Seminar (2). Prerequisite: Instructor permission. 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.) Minimum of six semester hours 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. 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.)

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 5271. Turbulence (3). Prerequisite: MET 4301, MET 5311, or OCP 5253. Turbulent transport of momentum and heat; dynamics of turbulence; homogenous isotropic turbulence; wall bounded shear flows; statistical description of turbulence; spectra. Also offered in the Department of Oceanography.

OCP 5551. Physics of the Air-Sea Boundary Layer (3). Prerequisite: MET 4301 or instructor permission. 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 examines the pedagogical content knowledge needed to teach earth/space science.

DeVoe L. Moore and Family Center for the Study of Critical Issues In ECONOMIC POLICY AND GOVERNMENT

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://www.coss.fsu.edu/dmc/>

Director: Keith R. Ihlanfeldt; **Associate Director:** Sam Staley; **Professors:** Barrilleaux, Benson, Chapin, Feiock, Gwartney, Holcombe, Rasmussen

The DeVoe L. Moore and Family 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 designed to increase understanding about the effects of local and state rules and regulations. 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 students are employed on research contracts and grant projects on the basis of their contributions in time and skill. The center offers fellowships for students writing dissertations on subjects related to the center's mission.

ECOLOGY:
See Biological Science

Department of ECONOMICS

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://www.coss.fsu.edu/economics/>

Chair: R. Mark Isaac; **Professors:** Benson, Cobbe, Cooper, Fournier, Gwartney, R. Holcombe, Ihlanfeldt, Isaac, Marquis, Mason, S. Norrbin, Rasmussen, Schlagenhauf, Schmetmann; **Associate Professors:** Atolia, Beaumont, McCaleb, Zuehlke; **Assistant Professors:** Hamman, Ku, Lightle, Pevnitskaya, Qi, Ryvkin, Semykina, Serra; **Courtesy Professors:** DuMond, Evans, Falaschetti, Großer, Stratis; **Professors Emeriti:** Canterbury, Downing, Laird, Macesich, Rockwood; **Lecturers:** Calhoun, Corey, L. Holcombe, O. Norrbin, Showman

The Department of Economics offers programs leading to the Master of Science (MS) and Doctor of Philosophy (PhD) 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, supercomputing, 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

A score of at least 148 on the verbal aptitude portion and 148 (MS) or 151 (PhD) on the quantitative aptitudes portions 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.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Applicants should provide the department with a statement of purpose, a resumé or curriculum vitae, and at least three letters of recommendation addressing the applicant's potential for graduate study.

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.

Exceptions to these departmental standards can be made when post-college experience or specific training suggests the applicant would contribute meaningfully to the graduate program.

Students who have completed undergraduate courses in intermediate microeconomics, intermediate macroeconomics, econometrics, linear algebra, calculus and statistics, or their equivalent, should arrange to enter the program in the fall term, or be prepared for delays in completion of their program of study, owing to the way in which required core courses are sequenced. Students without background courses should arrange to arrive on campus in time to complete these background courses prior to the beginning of the Fall term of study. All new PhD admissions should arrange to arrive on campus 2-3 weeks prior to beginning of Fall term for math review.

Application Deadlines

Completed admission applications for U.S. citizens should be submitted no later than two months prior to the term the student plans to enter the University; 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 15th, for fall entry into the graduate program. Since Fellowship applications are due in January, outstanding students who want to be considered for a University

or Presidential fellowship must submit the application and supporting documents to Department by December 15th. More information on these fellowships can be found at <http://www.gradstudies.fsu.edu/Funding-Awards/Graduate-School-Fellowships-and-Grants>.

Departmental Teaching and Research Assistantships

Between twenty and twenty-five teaching and research assistantships are offered by or through the department each academic year, primarily for doctoral students. Graduate assistants normally take nine hours of academic work per semester. Assistantships may be either ten (quarter time) or twenty (half time) hours per week. At present, half-time assistantships pay \$16,000 for nine months. Summer stipends are awarded separately.

Currently, all departmental assistantships for U.S. residents carry with them waivers of matriculation and out-of-state tuition costs, but not other non-waivable mandatory fees. For the 2011-2012 academic year, the value of these waivers was \$350.88 per credit hour for in-state students or \$952.22 per credit hour for out-of-state students. It is not usually possible for the department to waive out-of-state tuition for non-residents of the United States, even if they are offered an assistantship.

Students entering the PhD program with a Bachelor of Science degree may apply for a department assistantship for a maximum of four years; students entering the PhD program with a master's degree may apply for a maximum of three years. Assistantship appointments are for the academic year. Renewal of an assistantship requires that the student make normal progress in terms of grades, job performance, and timely completion of the required examinations. Subject to availability of funds, if other progress is normal, students who maintain a graduate grade point average (GPA) of at least 3.3 can expect continued financial support.

The department does not require any separate application forms for those who desire an assistantship. Although there is no formal deadline, assistantships allocated to entering students are usually assigned by March 15th for the subsequent academic year. All awards are made on the basis of academic achievement and professional skill development.

University and college fellowships, fellowships and assistantships for minority students, and student loans are separately applied for and have separate deadlines. Fellowship applications are due in January, and must be submitted directly to Department of Economics.

Master of Science (MS) Program

Applied MS Program

The Applied MS program 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. The program can be completed in a calendar year if the student takes a course load of twelve hours each semester and six or nine hours in the 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 with a sufficient background in econometrics and statistics may substitute the doctoral core sequence in econometrics (ECO 5416 and ECO 5423) for the MS sequence with the prior approval of the Graduate Director. All attempts at core coursework are included in the core GPA calculation.

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 electives (six hours) approved by the Program Director and two semesters of the seminar course ECO 5922, Professional Development for Economists (2). Completion of the applied project involves registration and attendance in ECO 5973 during the Summer B and Summer C sessions for three hours each. During this sequence, the student selects, writes, and presents an applied project. The project track requires a minimum of thirty-two 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 electives (six hours) approved by the Program Director. 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 Graduate 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, provided they can demonstrate the relevance of the coursework to their program of study, and provided they obtain prior approval of the Graduate Director.

Traditional MS Program

The MS is also offered via the PhD track; students selecting this option 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 history of economic thought (ECO 5305) 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. These thirty-three credit hours must be completed with a 3.25 minimum GPA.

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
- Financial and monetary economics
- Experimental economics
- Industrial organization and regulation
- International economics and development
- 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 semester, graded on an S/U basis and generally taken for zero credit hours, is a requirement of the PhD program.

A doctoral student without previous graduate work must complete fifty-four semester hours of graduate coursework, including instruction in fundamental quantitative techniques, and may obtain the master's degree en route. Not more than six of the required fifty-four hours may be directed individual study (DIS) or graduate tutorial coursework. 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 adviser, 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.

Joint Law-Economics Degree Program

The Department of Economics and the College of Law offer a program allowing a student to qualify concurrently for the Juris Doctor (JD) and the Master of Science (MS) in economics. Students must complete eighty semester hours in the College of Law and twenty-four hours in economics. Economics hours encompass the six courses normally required for the master's and an applied project. Students pursuing this joint degree must begin studies in College of Law.

Definition of Prefixes

ECO—Economics

ECP—Economic Problems and Policy

ECS—Economic Systems and Development

Graduate Courses

The department offers some graduate courses that are normally not taken by graduate students pursuing degrees in economics but which are intended 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, 5111, 5205, 5226, 5705, 5715, ECP 5705 and ECS 5028. [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). 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 5111. Intermediate Microeconomic Theory (3). Prerequisites: ECO 2013, 2023. Supply, demand, cost of production theory of the firm, factor price determination, and other microeconomic resource allocation questions.

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). 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. 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 will explore 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 5204. Macroeconomic Theory I (3). This course introduces the basic tools in macroeconomic theory.

ECO 5205. Money and National Income Determination (3). Prerequisites: ECO 2013, 2023, 3223. The basic model of income determination is built emphasizing the roles of real and monetary sectors of the economy. Results of empirical work are surveyed. A project will be required of each graduate student.

ECO 5206. Macroeconomic Theory, Practice, and Policy (3). This course investigates the classical and Keynesian models of income determination, post-Keynesian macro theories, stagflation, aggregate production functions and productivity, and 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 5208. Global Macroeconomics (3). Prerequisite: ECO 5206. This course is a continuation of the first macroeconomics course for master's students. Though the focus will be on macroeconomic applications, macroeconomic theory will be expanded to consider the implications of income distributions, wealth distributions, financial market innovations, price markup practices, and global integration for macroeconomics.

ECO 5226. Issues in Money and Banking (3). Prerequisites: ECO 2013, 2023. The role of monetary policy in various macroeconomic theories is emphasized. Controversy over the effects monetary policy has on employment, inflation, and interest rates is emphasized.

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 will be 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 5305. History of Economic Thought (3). This course covers analysis and critique of economic ideas, beginning with the Greeks. Concentration will be upon classical economists.

ECO 5403. Static Optimization in Economics (3). Mathematical methods used for the solution of static optimization problems in economic theory.

ECO 5405. Introduction to Mathematical Economics (3). 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. 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 Programming (3). Prerequisite: Graduate standing or instructor permission. This course is an introduction to computer programming using the SAS language, covering how to write SA programs to accomplish the types of statistical tasks, frequently encountered in economic and other social research.

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. 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 5505. Public Finance (3). Principles of taxation and debt, shifting and incidence, public expenditures and redistribution theory.

ECO 5506. Public Goods (3). Prerequisite: Approved course in Experimental Economics. Corequisite: Approved course in Experimental Economics; may be taken as a prerequisite. This course explores the theory, empirical evidence, and experimental evidence regarding how human societies provide public goods.

ECO 5533. Public Choice (3). 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). 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, 2023. 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. ECO 3223 and ECO 4203 recommended. 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 5716. Seminar in the Theory and Policy of International Finance (3). Institutional characteristics of international financing of trade, relations between money flows and real trade, theories of foreign exchange and short-term capital flows, long-term capital flows, alternative exchange rate systems. Contemporary international monetary problems and the role of aid in economic development also will be discussed.

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 5914. 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.

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.

ECO 5932r. Graduate Tutorial in Economics (1–3). (S/U grade only.) Prerequisites: economics graduate students; instructor permission. In-depth study of specific topics in economics. Enrollment limited to five students. May be repeated to a maximum of six semester hours.

ECO 5936r. Special Topics (1–3). This course code is used for special topics of current interest or to benefit from the specialties of visiting faculty. May be repeated to a maximum of six semester hours. May be repeated in the same semester.

ECO 5940r. 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.

ECO 5971r. Thesis (3–6). (S/U grade only.) A minimum of six semester hours is required.

ECO 5972. Extended Master's Paper (3). (S/U grade only.)

ECO 5973r. Applied Master's Project (3). Prerequisites: ECO 5114, 5117, 5206, 5208, 5420, 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 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 6936. Topics in Microeconomics (3). Prerequisites: ECO 5115, 5116, or instructor permission. 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.) 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 to a maximum of three semester hours.

ECO 6939r. Teaching Workshop (0–3). (S/U grade only.) 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, 5116, 5204, 5207. Open to students who have completed the core PhD theory courses and are engaged in intensive study for their PhD preliminary examinations. May be repeated to a maximum of twelve semester hours.

ECO 6980r. Dissertation (1–24). (S/U grade only.)

ECO 8966r. Master's Comprehensive Exam (0). (P/F 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). 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). 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 5205. Labor Markets (3). The primary topics of the course are the determinants of labor demand and supply, wage differentials, unions and the operation of labor markets, labor mobility, and the dynamics of labor markets.

ECP 5405. Industrial Organization (3). Prerequisites: ECO 5115, 5116. 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). 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 5457. Economics of Corruption (3). Prerequisite: Graduate standing. This course examines the measurement of corruption; its economic costs; its causes, based on theory and on macro-based, micro-based, and experimental studies; and the effectiveness of different anti-corruption interventions. This course also defines corruption, studies how to measure it, and asks why some countries are systematically corrupt while others have escaped the corruption trap and why, facing the same incentives, some individuals are corrupt and others are not.

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). Prerequisites: 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.

ECS 5005. Seminar in Comparative Economic Systems (3). Utilization of basic economic tools and concepts to analyze efficiency and optimality considerations of various economic systems. Both theoretical models of economic systems and actual case studies will be utilized.

ECS 5015. Economic Development: Theory and Problems (3). Overall determinants of pace and structure of development, and specific issues, e.g., industrialization, human resources, foreign sector, income distribution, rural development, technology, etc.

ECS 5335. Economies in Transition (3). Prerequisites: ECO 2013, 2023. The analytical focus of this course is concentrated on the most important features of transition from centrally planned command economies toward market economic systems.

ECONOMIC PROBLEMS AND POLICY: see Economics

ECONOMIC SYSTEMS AND DEVELOPMENT: see Economics; Latin American and Caribbean Studies

EDUCATIONAL ADMINISTRATION/LEADERSHIP: see Educational Leadership and Policy Studies

Department of EDUCATIONAL LEADERSHIP AND POLICY STUDIES

COLLEGE OF EDUCATION

Web Page: <http://www.coe.fsu.edu/ELPS/>

Chair: Patrice Iatarola; **Professors:** Herrington, Hu, Irvin, Milligan, Milton, Wetherell; **Research Associate:** Schrader; **Associate Professors:** Easton, Iatarola, Lang, Rutledge, Schwartz; **Associate In:** Blackwell-Flanagan, Wicker; **Assistant Professors:** Bertrand Jones, Cox, Gawlik, Guthrie, Tandberg; **Faculty Emeriti:** Beckham, Bender, Dalton, Funk, Jahns, Kannwischer, Kunkel, Lick, Mann, Schroeder, Snyder, Stakenas, Thomas, Waggaman

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 studies 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 and higher education as described in the sections that follow. In addition, the department offers graduate certificates in Educational Policy, 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 a transcript of Graduate Record Examinations (GRE) scores should be submitted with the University application, available at <https://admissions.fsu.edu/gradapp/>. The following items should be sent to the *Department of Educational Leadership and Policy Studies, 1209 Stone Building, Florida State University, Tallahassee, FL 32306-4452*: 1) a letter of intent that explains the basis for the applicant's pursuit of the degree and his or her commitment to the field of educational leadership and policy, higher education, or foundations of education; 2) a resumé providing a record of the applicant's educational and work history; 3) letters of recommendation from three persons who know the applicant's educational and/or professional background and believe that the individual will be making an appropriate career commitment by enrolling in an educational leadership and policy studies program at Florida State University; and 4) a combined score on the quantitative and verbal portions of the GRE. **All applicants must present a GRE score prior to the time of admission.** 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://www.coe.fsu.edu/ELPS/> for specific admission information for each program.

EDUCATIONAL LEADERSHIP AND POLICY

Majors within Educational Leadership and Policy are focused on the preparation and continuing development of educational leaders and policy analysts who can act effectively and ethically and are committed to the study, development, implementation, and evaluation of educational policy at every level. The department continues to build upon long-standing traditions of innovative research, well-known faculty, and nationally-recognized programs to provide students with some of the best resources available.

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 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.

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 experience. Information is available at <http://www.coe.fsu.edu/EDA>.

Education Policy and Evaluation

The major in Education Policy and Evaluation offers a master's, doctoral, and two certificate programs 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.

Two certificates that provide graduate-level training for professionals and graduates students are also available. 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. The Certificate in Educational Policy provides the necessary skills to carry out effective policy planning, analysis, implementation, and evaluation that respond to current issues in educational policy. Information is available at <http://www.coe.fsu.edu/EPE>.

Historical and Philosophical Foundations of Education

The major in Social, Historical and Philosophical Foundations of Education emphasizes the examination of educational issues from the disciplinary perspectives of history and philosophy at the master's, specialist, 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 positions in schools, governmental agencies, and other policy-oriented organizations. Information is available at <http://www.coe.fsu.edu/SHPFE>.

Sociocultural and International Development Education Studies (SIDES)

The SIDES 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. Further information is available at <http://www.coe.fsu.edu/SIDES>.

Definition of Prefixes

ADE—Adult Education

CGS—Computer General Studies

ECT—Education: Career/Technical

EDA—Education: Administration

EDF—Education: Foundations

EDG—Education: General

EME—Education: Technology and Media

Graduate Courses

ADE 5070. Comparative and International Adult Education (3). Nature of adult education programs in other societies and of international trends in the field of adult education. Emphasis on comparative analysis of the role and structure of adult education and of the relation of programs to their cultural and sociopolitical contexts.

ADE 5193. Education and Training in Gerontology (3). Principles, theory, and practice in the development of education and training in gerontology.

ADE 5675. Issues in Adult and Continuing Education (3). Prerequisite or corequisite: ADE 5080. An exploration and analysis of philosophical, theoretical, and practice issues which shape research and practice in adult and continuing education.

ADE 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve semester hours.

ADE 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.

ADE 5942r. Internship in Continuing Education (2–4). (S/U grade only.) A directed practicum to develop administrative and programming competencies by translating theory into practice, testing principles, and evaluating actions. May be repeated to a maximum of twelve semester hours.

ADE 5971r. Master's Thesis (1–6). (S/U grade only.) Minimum of six semester hours required.

ADE 5973r. Specialist in Education Thesis (1–6). (S/U grade only.) Minimum of six semester hours required.

ADE 6920r. Adult Education Colloquium (1). (S/U grade only.) Lectures and discussion by distinguished educators, social scientists, graduate faculty, and students. May be repeated to a maximum of three semester hours.

ADE 6980r. Dissertation (1–12). (S/U grade only.)

ADE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

ADE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

ADE 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

ADE 8976r. Master's Thesis Defense (0). (P/F grade only.)

ADE 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

ADE 8985r. Dissertation Defense (0). (P/F grade only.)

CGS 5310. Technology and Communication in Schools (3). This course explores information and communication technologies for the management of administrative and instructional programs in educational systems, enhancement of community relations, and application of effective communication techniques, tools, and methodologies.

ECT 5905r. Directed Individual Study (1-3). (S/U grade only.) May be repeated to a maximum of five semester hours.

ECT 5915r. Supervised Research (1-4). (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.

ECT 5947r. Internship (1-8). (S/U grade only.) May be repeated to a maximum of twelve semester hours.

ECT 5973r. Specialist in Education Thesis (1-6). (S/U grade only.) A minimum of six semester hours credit is required.

ECT 6980r. Dissertation (1-12). (S/U grade only.)

ECT 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

ECT 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

ECT 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

ECT 8985r. Dissertation Defense (0). (P/F grade only.)

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 5109. Educational Management Development (3). Presents history, rationale, and current status of educational management development (EMD) in Florida. Studies management competencies, acquisition, and their assessment; establishes individualized growth planning. Relates EMD to effective schools and school improvement; addresses implications for prospective administrators and supervisors.

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.

EDA 5218. Application of Leadership Theory (3). Applies leadership theory to problems of practice through role plays and through models of reflective practice.

EDA 5219. Human and Fiscal Resources in Education (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. Issues involving recruitment, selection, retention of school personnel, and collective bargaining are examined as they relate to state and federal law.

EDA 5222. Personnel Administration in Education (3). Emphasizes the theoretical and practical aspects of planning, implementing, and evaluating functions in education. Special attention will be given to the role of the building principal in personnel administration and collective bargaining.

EDA 5232. Legal Aspects of Public School Administration (3). A survey of legal issues involving public schools, including the rights and responsibilities of students and teachers, risk management in the school setting, powers of local boards and superintendents, legal liability and accountability, and documentation and evaluation. Students review case law, state and federal statutes, constitutional provisions, and regulatory standards.

EDA 5242. School Finance (3). 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 will 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 5422. Applied Data Analysis and Assessment of Educational Leaders (3). This course provides participants with skills and knowledge in using the results of screening, diagnosis, progress monitoring and outcome reading assessments to guide instructional decision-making in grades K–12, as described in Florida's Reading Program Specification 3.3 and 3.4. Topics include assessment-driven intervention, including the selection of core and supplemental reading programs and appropriate instructional strategies.

EDA 5423. Decision-Oriented Educational Research (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 Principalship (3). This course provides an overview of research on the position of the K-12 Assistant Principal. The course addresses issues or 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 examines the ways that school leaders bring multiple resources to focus on curriculum, instruction, and academic achievement. It focuses on how strong instructional leadership is achieved, how school leaders promote and sustain instructional leadership, and what factors undermine instructional leadership.

EDA 5569. State Education Policy (3). 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 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.

EDA 5931r. Special Topics in Educational Administration (1–3). 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 course integrates DOE 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 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 5946. Practicum in Educational Leadership II (1). Prerequisite: EDA 5945. Under the guidance of an expert in the field, this course applies experiential learning and mentoring in a school context. Particular attention is paid to issues of diversity, decision-making, and effective communication.

EDA 5947. Practicum In Educational Leadership III (1). Prerequisite: EDA 5945. This course provides interaction with experts in the field, reflection and evaluation of oneself as a leader, participating in on-going mentorship experiences, and studying contemporary topics in educational leadership

EDA 5971r. Thesis (1-6). (S/U grade only.) A minimum of six semester hours is required.

EDA 5973r. Specialist in Education Thesis (1-6). (S/U grade only.) A minimum of six semester hours credit is required.

EDA 6101. Organizational Theory (3). 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 6193. Leading Learning (3). This course presents a rationale, history, and the current research and practice of instructional leadership and the skills required among the students. This investigation takes place within the context of school accountability and federal guidelines.

EDA 6207. Leadership for School Renewal (3). Developing catalytic leadership for creating a vision description of total quality school/school district and a strategic plan for realizing that vision.

EDA 6424. Research in Schools (3). Prerequisite: Admission to a doctoral program. The course provides students with the knowledge and skills required to conduct systematic, empirical research in Pre-K-12 school settings. Working in collaboration with superintendents, principals, teachers, and other practitioners, students identify one or more research questions addressing issues of critical importance to educators in the field.

EDA 6930r. Departmental Seminar and Research Projects (1-3). (S/U grade only.) Weekly seminar on current educational problems. May be repeated to a maximum of nine semester hours.

EDA 6940r. Internship in Educational Administration (3). (S/U grade only.) Field experience in administration, including supervision and curriculum. 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 8976r. Master's Thesis Defense (0). (P/F grade only.)

EDA 8977r. Specialist in Education Thesis Defense (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 will provide future teachers, educators, policymakers, and others with an understanding of the history and socio-economic context of the educational experience of African-Americans and Latinos. Although the two largest minority groups in the United States, African Americans and Latinos are under-represented among students pursuing advanced coursework, in high school graduation rates, college completion, and other indicators of academic achievement. This course will explore factors that have impeded academic achievement at the K-12 and university levels, in addition to examining programs that foster success.

EDF 5449. Survey Research Methods (3). Introductory course in the design, use, and analysis of questionnaires for data collection; significant research questions and strengths and weaknesses of various methodologies will be discussed. Hands-on practice in questionnaire design.

EDF 5461. Introduction to Program Evaluation (3). 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. Designing and implementing, process, and outcome of evaluation of innovative programs and program components.

EDF 5464. Qualitative Methods for Program Evaluation (3). Prerequisite: EDF 5481 (recommended). This course develops students' skills in collecting qualitative data for program evaluation. Emphasized here are the political context of evaluation and the strategies for ensuring the production of quality work.

EDF 5488. Computer Analysis of Educational Data (2). Prerequisite or corequisite: EDF 5400 or equivalent. Acquaints students with Statistical Package for the Social Sciences (SPSS). Emphasis on editing text on remote terminals, data collection, and management.

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). 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). 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). 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. Education and Culture (3). 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). An introduction 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 5631. Education and Equality (3). Prerequisite: EDF 5630. Examines empirical evidence and related theories which bear on the question of the role of education in contributing to social and economic equity.

EDF 5641. Introduction to Policy Studies in Education (3). 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 5651. Case Studies in Education Policy (3). Prerequisite: EDF 5652. This course examines the emergence of selected United States' education policies through case study analysis.

EDF 5652. Policy Development in Education (3). 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 5661. The Language of Education Policy (3). Prerequisite: EDF 5641. Focuses on the relationship between evaluation and policy and on the production, utilization, and analysis of policy documents from a sociolinguistic perspective. Emphasis will be given to understanding the functions of oral and written discourse in policy evaluation and analysis.

EDF 5706. Gender and Education in Comparative Perspective (3). 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 will develop their ability to analyze gender in educational settings and to incorporate gender analysis into educational planning in a variety of contexts.

EDF 5710r. Contemporary Readings in American Education (3). Examines selected readings on current educational problems and issues. May be repeated once for a total of six semester hours. Different texts are used in course each time it is offered and instructors vary.

EDF 5763. The Educational Consultant: Fieldwork Techniques (3). Study of the role of the consultant and ethical factors; field methods; use of time, reporting, personal organization, interviewing, group work, and record keeping.

EDF 5815r. Comparative Studies in Education (2-5). Examines the history and source materials of comparative education and selected educational issues or problems as discussed in the current social science literature from a comparative perspective. May be repeated to a maximum of ten semester hours.

EDF 5850. International Development Education (3). 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 Policy in Developing Countries (3). Course explores contemporary educational policies with an emphasis on education in developing countries. In accomplishing this objective the course has three primary goals: 1) study the discipline of comparative politics; 2) discuss the policy-making process in the institutions that make educational policies in developing countries; and 3) compare current topics in educational policy analysis.

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). Critically reviews theories and research on the role of educational innovation in the development process.

EDF 5896. Education and Political Development (3). Examines the political and sociological theories, concepts, and research which contribute to the understanding of the role of education in political development and policy making.

EDF 5897. Sociology of Education and Development (3). Introduction to sociological theories of national development and educational change. Examines social and cultural factors that affect education and the purported role of education in the development process.

EDF 5907r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of five semester hours.

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). Will offer 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 nine semester hours.

EDF 5943r. Supervised Teaching (1–4). (S/U grade only.) May be repeated to a maximum of five semester hours.

EDF 5974r. Thesis (3–6). (S/U grade only.) A minimum of six semester hours is required.

EDF 5975r. Specialist in Education Thesis (3–6). (S/U grade only.) A minimum of six semester hours is required.

EDF 6475. Qualitative Methods in Educational Research (3). Prerequisites: EDF 5612, 5630. 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 6479. Qualitative Data Analysis (3). Prerequisite: EDF 6475 or 5464. This course focuses on the analysis, interpretation and reporting of qualitative data collected during interpretive research.

EDF 6547. Philosophical Foundations of Education Research (3). Prerequisites: 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). 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. 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. 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 6653. Planning Education for Socioeconomic Change (3). Provides a comprehensive overview of the theory and practice of planning in the context of development. Uses the theoretical foundation of planning as a generic framework for examining educational planning.

EDF 6945r. Internship in Educational Policy (1–9). (S/U grade only.) Prerequisite: EDF 5652. 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 Exam (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 8980r. Specialist in Education Thesis Defense (0). (P/F grade only.)

EDF 8987r. Dissertation Defense (0). (P/F grade only.)

EDG 5250. Curriculum and Instruction (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.

EDG 5253. Designing, Implementing and Evaluating Curriculum (3). Prerequisites: EDG 5250. This course provides the foundation for designing, implementing and evaluating curriculum in the context of change theory, school restructuring, and benchmarking processes. The course is designed for current and prospective administrators interested in understanding the broad implications of curriculum issues on organizational leadership and management.

EDG 5945r. Advanced Associate Teaching (3). (S/U grade only.) May be repeated to a maximum of nine semester hours.

EME 5941. Designs for In-Service Personnel Development (3). Systematic procedures for the design of staff development programs for educational, noneducational institutions.

HIGHER EDUCATION

A national leader in its field, the program in Higher Education offers study at the master's and doctoral levels, as well as the Certificate Program in Institutional Research. Students pursuing a master's degree may choose from emphases in student affairs or general administration (online). Both of the MS program tracks are 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 management and administration of postsecondary institutions. The PhD program also 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, and is intended to enhance an existing degree program. Information is available at <http://www.coe.fsu.edu/HE>.

Definition of Prefixes

EDA—Education: Administration

EDF—Education: Foundations

EDH—Education: Higher

SDS—Student Development Services

Graduate Courses

EDA 5227. The Role of the Woman Administrator in Education (3). Basic understandings of the role of the woman administrator in education, with focus upon her preparation and performance as reflected in the literature.

EDA 5569. State Education Policy (3). 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 6930. Seminar in Literature, Research and Professional Writing (3) (S/U grade only) Weekly seminar on current educational problems.

EDF 5089. Black and Latino Education: History and Policy (3).

EDF 5941. Internship in Institutional Research (1–8). (S/U grade only.) Institutional research majors are assigned to offices or agencies engaged in institutional research. Practical applications related to classroom work.

EDH 5041. Intentional Interventions (3). This class 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 class 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). 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 5050. Seminar in Graduate Inquiry Resources (2). Analysis and evaluation of a research literature in education. Selection of a significant research topic and preparation of a literature review.

EDH 5051. Higher Education in America: Basic Understandings (3). 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 will be 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). Prerequisites: EDF 5400 and EDH 5051. This course develops a historical and theoretical foundation for conceptualizing “outcomes” of undergraduate education. It considers theoretical, technical, and policy issues in the assessment of outcomes.

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). Classroom and individualized instruction including objectives-oriented instruction, evaluation, student motivation, and media utilization in the college curriculum.

EDH 5405. Legal Aspects of Higher Education (3). 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). The course covers institutional finance and business administration in American colleges and universities. Topics include financial operations, budgeting, organizational structures, unit functions, institutional culture, and contemporary issues in postsecondary finance and administration.

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 5631. Academic Leadership and Middle Management in Higher Education (3). The dynamics and cultures of colleges and universities are analyzed through a detailed study of the structures, functions, and politics of academic departments. In addition, the interdependence of tasks and responsibilities of provosts, deans, and department chairs will be studied to demonstrate how leadership styles at these different levels converge and translate into teaching, research, and service at the department level.

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. Strategic 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 5906r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of five semester hours.

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). Prerequisites: EDH 5050, 5051, and 5054; or their equivalents. 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 semester hours.

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.) 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 credit is required.

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, 6635. 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 6206. College Curriculum: Issues of Philosophy and Development (3). Prerequisite: EDH 5051 or instructor permission. This course examines perspectives that shape undergraduate and graduate college curricula. Students in the course analyze the structure and content of curriculum, how faculty teach, how students approach learning, and the dynamics of the curricular change process.

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. Through case studies, contemporary research and concepts drawn from the literature of organizational theory, students in this course are introduced 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 6935. 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.

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.)

SDS 5040. Student Personnel Work in Higher Education (3). Review of current policies and practices of selected areas of student personnel and selected administration.

SDS 5624. The American College Student (3). A developmental study of the contemporary college student and the campus climate.

SDS 5804. Practicum in Student Personnel Work (3). Provides opportunity for supervised practical experience in college student personnel work.

Department of EDUCATIONAL PSYCHOLOGY AND LEARNING SYSTEMS

COLLEGE OF EDUCATION

Web Page: <http://www.coe.fsu.edu/EPLS/>

Chair: Betsy Becker; **Professors:** Becker, Driscoll, Eklund, Klein, Pfeiffer, Prevatt, Sampson, Shute, Tenenbaum; **Associate Professors:** Almond, Darabi, Dennen, Ebener, Eccles, Jeong, Losh, Roehrig; **Assistant Professors:** Canto, Johnson, Ke, Lampropoulos, Osborn, Paek, Phillips, Turner, Yang; **Professors Emeriti:** Branson, Kaufman, Keller, Kelly, Oosterhof, Pargman, Peterson, Reardon, Reiser, 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, 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
Sports Psychology M,D
Measurement and Statistics M,S,D

Instructional Systems

Instructional Systems M,D
Open and Distance Learning M
Performance Improvement and Human Resource Development M

Counseling and Human Systems

Career Counseling - Combined MS/EdS
Mental Health Counseling - Combined MS/EdS
School Psychology - Combined MS/EdS with initial certification in DOE area 330, (PK-12)

Counseling Psychology and Human Systems

Combined Program in Counseling Psychology and School Psychology D

Rehabilitation Counseling M,S

Certificate in Human Performance Technology
Certificate in Online Instructional Development
Certificate in Measurement and Statistics

Educational Psychology Program

The program offers master's, specialist, and doctoral degrees in three major areas: Learning and Cognition, Measurement and Statistics, and Sport Psychology.

The major in **Learning and Cognition** is practitioner-oriented at the master's level and research-oriented at the doctoral level with coursework in cognition, learning theory, and research methods. Graduates of this major are prepared to take positions in universities, educational agencies, and research organizations that focus on improving educational practice.

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.

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 private practice as well as in college and university settings as teachers, researchers, and performance enhancement counselors to athletes. Students interested in both School Counseling and Sports Psychology must apply and be accepted into each program, separately. Only those who are admitted into both programs will be able to then apply for the Combined Program in School Counseling and Sports Psychology (PhD level).

Instructional Systems Program

The program offers the master's and doctoral degrees in instructional systems with majors in three areas: Instructional Systems, Open and Distance Learning, or Performance Improvement and Human Resource Development. The master's programs provide students the skills necessary to analyze learning and work-performance problems, and to design, develop, and evaluate solutions to these problems. In addition, the doctoral program places a strong emphasis on inquiry and research skills, and requires students to establish expertise by obtaining a minor in a discipline related to instructional systems. Graduates from the instructional systems program are prepared to take positions in universities, business and industry, military and governmental agencies, and public schools.

Admission and Application Information

Applications for admission are received and reviewed at any time during the year, although some programs admit students in the Fall semester only.

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 other than English.

Minimum requirements to the specialist or doctoral programs include a grade-point average of 3.3 for the last two years of the undergraduate program, a master's degree from a recognized institution, and the following minimum scores on the new GRE:

A score of 156 or above (550 or above on the prior scale) on the verbal reasoning section of the GRE. Preference will be given to applicants who earn a percentile rank of 75% or above on the verbal reasoning section of the GRE.

A score of 146 or above (550 or above on the prior scale) on the quantitative reasoning section of the GRE. Preference will be given to applicants who earn a percentile rank of 50% or above on the quantitative reasoning section of the GRE. Students applying to the program in Measurement and Statistics should attain a minimum score of at least 160, or above the 85th percentile, on the quantitative reasoning section.

A score of 4.0 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 other than English.

To increase the diversity of professionals in the fields represented by the programs in this department, individuals are encouraged to apply who do not meet the minimum requirements but can provide other indications of probable success in the desired program (e.g., professional experience).

Applicants must also provide a letter of intent indicating career goals and expectations and submit 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.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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
PET—Physical Education Theory
SYP—Social Processes

Graduate Courses

ADE 5080. Foundations of Adult and Continuing Education (3). Emphasis is on the design and implementation of continuing education.

ADE 5083. Human Resource Development (3). Comprehensive survey of the structure and function of human resource development in organizations. Focus is on alternative perspectives, professional roles and competencies, and organizational features affecting Human Resource Development operations and programs.

ADE 5084. Analytical Applications in Human Resource Management, Training and Development (3). This course focuses on case studies and the analytical skills necessary to evaluate the need for and effectiveness of human resource management, training, and development interventions and business and industry, public and community agencies, and not-for-profit organizations. Students should have a basic understanding of statistics and will practice calculating efficiency, effectiveness, and return on investment formulas.

ADE 5186. Program Leadership Development (3). Principles and theory of program development and appraisal applied to selected adult education enterprises.

ADE 5189. Staff Training and Development (3). Theory and practice of training and staff development based on the design and use of experiential instructional interventions to enhance individual, group, and organizational efforts.

ADE 5380. Processes of Community and Adult Education (3). Focus is on processes of planned change through formal and informal adult and continuing education programs in a variety of community and agency contexts.

ADE 5385. Adult Learning (3). A critical examination of major problems in adult learning. Emphasis given to the psychological factors affecting learning ability, achievement, and motivation through the adult life-cycle.

ADE 5672. E-Learning for Managers (3). This course prepares managers in all types of organizations with the essential principles and practices impacting the e-learning revolution in business and government. Students explore the convergence of e-learning with knowledge management and learning systems, learning content management systems, and performance support systems.

ADE 5932r. Special Topics in Adult Education (1-3). Topical areas vary to focus on current concerns and issues in the field not addressed in other courses. Areas presently offered include: leadership in adult education enterprises, participatory planning research and evaluation, and foundations of HRD policy. May be repeated to maximum of twelve semester hours.

ADE 6676. Human Resource Development Policy Seminar (3). Examines the policy implications of HRD practice and the kinds of reforms in corporate, community, and public life that are required in order to make lifelong learning a reality. Develops the skills of participants in diagnosing social and economic trends, analyzing learning environments in social institutions, and devising new HRD-supportive policy.

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.

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.

EDF 5400. Basic Descriptive and Inferential Statistics Applications (4). Descriptive statistics, hypothesis testing, confidence intervals, correlational techniques, and introduction to the general linear model.

EDF 5401. General Linear Model Applications (4). Prerequisite: EDF 5400. 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 5401 or equivalent. Multivariate ANOVA, covariance, repeated measures designs, nested designs, and generalizability theory.

EDF 5406. Multivariate Analysis Applications (3). Prerequisite: EDF 5401. Design and analysis of research studies with multiple independent and dependent variables.

EDF 5409. Causal Modeling (3). Prerequisite: EDF 5401. Considers causal modeling techniques, including path analysis, confirmatory factor analysis, and LISREL.

EDF 5410. Nonparametric Analysis Applications (3). Prerequisite: EDF 5400. Consideration and application of topics in nonparametric statistics.

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 5400. Introduction to test theory; mathematical bases for operational procedures; practical applications of theory.

EDF 5434. Measurement Theory II (3). Prerequisite: EDF 5432. Prerequisite or Corequisite: EDF 5402 or 5401. An advanced course in the theory, principles, and techniques of measurement.

EDF 5435. Theory of Scaling (2). Prerequisite: EDF 5432. 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 5443. Measurement and Evaluation in the Classroom (3). Prepares teachers for activities in testing, grading, test construction, interpretation and use of test scores, and evaluation of instructional effectiveness.

EDF 5445. Assessment of Learning Outcomes (3). Understand and develop tests that directly measure student achievement.

EDF 5448. Scale and Instrument Development (3). 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). Designing and implementing, process, and outcome evaluation of innovative programs and program components.

EDF 5464. Qualitative Methods for Program Evaluation (3). Prerequisite: EDF 5481 (recommended). This course develops the students' skills in collecting qualitative data for program evaluation. Emphasized here are the political context of evaluation and the strategies for ensuring the production of quality work.

EDF 5481. Methods of Educational Research (3). A survey of selected types of educational research and appropriate related techniques; emphasis on criteria of validity.

EDF 5906r. Directed Individual Study (1-3). (S/U grade only.) May be repeated to a maximum of twelve semester hours.

EDF 5910r. Supervised Research (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 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 5973r. Specialist in Education Thesis (1-6). (S/U grade only.) A minimum of six semester hours is required.

EDF 6499. Discourse and Conversation Analysis (3). This course prepares students to use discourse and conversation analysis techniques in their research.

EDF 6933. Measurement Seminar: Decision Processes (2). Prerequisite: EDF 5434. Examples of topics: item bias, adaptive testing, decision theory.

EDF 6937r. Seminar in Advanced Research Problems (1-3). This course may be repeated to a maximum of fifteen semester hours. It is designed for advanced students.

EDF 6980r. Dissertation (1-12). (S/U grade only.) May be repeated in the same semester.

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 5932r. Seminar in Instructional Design (1-2). (S/U grade only.) Faculty members and other instructional systems specialists present lectures on current topics and projects.

EDG 6287. Needs Assessment for Performance and System Planning (3). Characterization and development of models and procedures for strategic planning, needs assessment, needs analysis, quality management, and front-end analysis, and their use in system planning.

EDG 6328. Alternate Views of Teaching and Learning (3). 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 aims to heighten students' awareness of the critical issues in instructional systems. It will examine how research methodologies have been used to study these issues, will explore how research programs and theories are progressively honed, and will help students begin to define programmatic areas of disciplined inquiry.

EDG 6363. Practicum in Experimental Learning Research (3). Prerequisites: EDF 5400, 5481. Provides instruction and practice in planning, conducting, and describing (both orally and in writing) experimental research.

EDG 6925. Advanced Instructional Design and Development (3). Prerequisites: EDP 5216 and EME 5603. This advanced course enables students to develop course, unit, and lesson-level learning outcomes by applying the information-processing theory and R.M. Gagne's conditions-of-learning model.

EDP 5216. Theories of Learning and Cognition in Instruction (3). Examination and application of prominent contemporary theories of learning, cognition, and information processing to instructional settings.

EDP 5217. Principles of Learner Motivation (3). 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). 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 5054. Educational Technology: Theory and Practice in Instruction (3). Course focuses on the current theories and practices of using technology in teaching and learning. Students participate in a computer supported learning environment and integrate theory and technology into their practices.

EME 5405. Media, Text, and Technology (3). This course covers what media can and can not do, about texts that can be produced and disseminated and about the technologies that help and hinder the process of understanding.

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). Overview of systems theory applied to instructional systems development, includes principles and procedures for developing total instructional systems.

EME 5603. Introduction to Systematic Instructional Design (3). An introductory course in the systematic design of instruction. Includes practical experience in developing and evaluating instructional materials.

EME 5604. Designing Instructor-Led Courses (3). Prerequisite: EME 5603 or EDG 6925. Procedures for the design and development of instructor-led courses.

EME 5608. Trends and Issues in Instructional Design (3). Overview of the field of instructional design and technology. Includes historical perspective, research findings, and current issues and trends.

EME 5906r. Directed Individual Study (1-3). (S/U grade only.) May be repeated to a maximum of twelve semester hours.

EME 5975. Portfolio Review for Certificate Program in Online Instructional Development (0). (S/U grade only.) Students prepare a portfolio demonstrating that they are skilled in the use of distance learning strategies and technology.

EME 6357. Evaluation of Training in HPT (3). This course focuses on the evaluation of training and instruction through a systemic analysis of the organization sponsoring the training program. The course also provides the knowledge and skills for conducting an HPT-based evaluation of training systems. Students actively participate in discussions, presentations, synthesis of materials, and the writing of papers.

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 6925. 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). Prerequisite: EME 6415. Study of the evolution of multimedia instruction, with an emphasis on contemporary research and theory. Includes practice in the design and development of multimedia learning systems.

EME 6613. Design and Development of Electronic Performance Support Systems (3). Procedure for the design of electronic support tools. Each student will conceptualize, design, and develop a prototype for an electronic performance support tool.

EME 6616. Case Studies in Instructional Systems (2). Study of representative contemporary instructional delivery systems, their planning, development, and implementation.

EME 6631. Managing Instructional Development (3). Introduction to procedures for managing instructional development projects and organizations. Includes project and organizational design and development, staff development, and leadership principles.

EME 6635r. Seminar in Advanced Instructional Systems Problems (1-3). Offered periodically. Addresses special topics that are not covered in other courses. May be repeated to a maximum of six semester hours.

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 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.

PET 5054C. Motor Skill Learning (3). Research and theory of learning, performance, and related factors as applied to motor skills.

PET 5216. Applied Sport and Exercise Psychology (3). Emphasis in this course is based upon techniques and strategies for changing sport and exercise psychology as well as their theoretical bases.

PET 5222. Cognitive Processes in Sport Psychology (3). Prerequisite: PET 5216. 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). An examination of socio-cultural foundations of play, games, sport, and physical activity.

PET 5390r. Measurement in Sport and Exercise Psychology (3). Prerequisites: EDF 5400, 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 6217. Stress and Motor Performance (3). 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.

SYP 5105. Theories of Social Psychology (3). Surveys the major theoretical orientations predominant in the area of contemporary social psychology. The primary focus of this exploration will be the broad theoretical approaches to social psychology which have emerged over the last several decades. Additionally, a number of derivative theories from the general approaches will be examined. The primary goal of the course is to familiarize students with the major theoretical orientations of relevance to social psychology within which a number of more delimited theoretical models have intellectual roots. Such orientations as cognitive theory, behavioral theory, interactional theory, and the humanistic perspective will be discussed.

Psychological and Counseling Services

The Psychological and Counseling Services program offers work leading to the following degrees: Doctor of Philosophy (PhD) in the Combined Program in Counseling Psychology and School Psychology, or a combined Specialist in Education (EdS) and Master of Science (MS) in Counseling and Human Systems.

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 licensure. 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 (MS/EdS)

The combined specialist/master's 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 mental health agencies (e.g., substance abuse, career counseling, adult and child counseling). The combined specialist/master's degree includes a minimum of seventy-two semester hours. A supervised internship in an applied setting is also required. Students majoring in Counseling and Human Systems at the MS/EdS level select a specialization in Career Counseling and/or Mental Health Counseling. Each of these specializations are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) and students are eligible to take the National Counselor Examination during the spring semester of their last year of study.

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. It prepares personnel to practice as school psychologists within educational as well as nontraditional settings. This major is a Florida DOE-approved Other School Personnel Preparation program in school psychology grades PK through 12 (DOE Certification Area 330). The program is also accredited by the National Association of School Psychologists (NASP).

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, <http://www.career.fsu.edu/techcenter>, expands this mission to include serving individuals and students interested in career development and computer technology.

Admission Requirements

All applicants must at least meet the minimum State Board of Education requirements for undergraduate grade point average and/or Graduate Record Examinations scores. Recommended minimum scores are 153 (at least the 62nd percentile) on the verbal reasoning subtest and 149 (or the 49th percentile) on the quantitative reasoning subtest. In addition, international applicants must present a score of 80 on the Internet-based Test of English as a Foreign Language (TOEFL). Each degree offering may set different standards for admission based on programmatic objectives and the applicant pool. A formal application for graduate study must include the following: 1) official graduate application to Florida State University (apply online at <https://www.admissions.fsu.edu/gradapp/>), 2) three letters of reference, 3) an autobiographical statement, 4) a current resume, and 5) a statement of how the degree sought can meet personal/professional goals. All items except the official graduate application should be sent directly to the program admissions committee. For information concerning particular degree offerings or admissions contact: *Chair of Admissions, Psychological and Counseling Services, 3210 Stone Building, Florida State University, Tallahassee, FL 32306-4453.*

Definition of Prefixes

MHS—Mental Health Services
PCO—Psychology for Counseling
PSB—Psychobiology
SDS—Student Development Services
SPS—School Psychology

Graduate Courses

Psychological and Counseling Services

MHS 5005. Foundations of Counseling and Rehabilitation (3). Identification of the foundations underlying counseling and rehabilitation, including background philosophy, structure, and legislation.

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). Examines the relationship among psychological, social, environmental, disability, and multicultural factors as they pertain to understanding human behavior.

MHS 5310. Counseling Technology and Information Systems (3). Understanding and utilizing multimedia information systems in career development. Basic understanding of career development in the life cycle.

MHS 5340. Foundations of Career Development (4). Examines the career development of individuals and the process of career counseling and guidance.

MHS 5341. Career Development Program Design and Evaluation (3). Examines contemporary career interventions and strategies for program development and implementation.

MHS 5400. Introduction to Counseling Theories and Techniques (4). 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 5419. Systems Approach to Counseling (3). Conceptualizes counseling problems in systems terms; focus is on counselor and client as part of systems; systems-level counseling interventions.

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). Introductory group leader training course; theoretical and experiential components.

MHS 5710. Research in Human Services (3). Prerequisite: Introductory statistics. Development of skills in analyzing and critiquing research studies, and applying research knowledge to counseling practice.

MHS 5800r. Practicum: Counseling Concepts and Case Management (4). Corequisite: MHS 5400. Develops basic counseling skills in beginning counselor trainees, with an emphasis on self-awareness. Students receive training in the human services center, through an appropriate combination of direct client counseling, role play, instruction, and observation.

MHS 5801r. Practicum in Counseling and Rehabilitation (4). Students receive 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). May be repeated to a maximum of twelve semester hours.

MHS 5915r. Supervised Research (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 6220r. Individual Appraisal in Counseling (3). 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). 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). To understand behavior patterns of children and adolescents and develop effective strategies for behavior management.

MHS 6600. Consultation and Organizational Development (3). 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). Development of skills in clinical and managerial supervision. Understanding a variety of supervisory models.

MHS 6630. Program Development and Evaluation in Counseling (3). Needs assessment, programmatic goals and objectives, program planning, evaluation design, accountability, and dissemination.

MHS 6715. Design and Critical Review of Research in Counseling (3). Conceptualization of counseling problems in researchable terms; critical review of published counseling research.

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). 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.) Field counseling experience in planned setting. May be repeated to a maximum of eighteen semester hours.

MHS 6938r. Special Topics in Counseling Psychology (3). Investigation in-depth 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 (2-16). (S/U grade only.) Prerequisite: MHS 6805. 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 sixteen 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). Examines the effective application of computer technology in counseling psychology with an emphasis on mental health, education, and rehabilitation.

PCO 6930. Integrative Seminar (3). Prerequisites: MHS 6401, 6715. Examines theory, research, and practice in counseling as a foundation for completing dissertation research and the doctoral internship.

PSB 5066. Biological Bases of Learning and Behavior (3). An overview of human biological development and its influence on learning and behavior with an emphasis on disorders of learning and development.

SDS 5820r. Internship (4–12). (S/U grade only.) Field practical experience in a planned setting. May be repeated to a maximum of eighteen semester hours.

SPS 5055. Foundations of School Psychology (3). An introduction 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). An overview of emotional, social, and behavioral disorders of children and adolescents with a focus on characteristics, classification, and issues and strategies in assessment.

SPS 5191. Assessment of Intelligence (4). Prerequisite: Instructor permission. 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. 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. Assessment of 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. Includes activities related to collection, interpretation and reporting of assessment data.

SPS 5193. Laboratory in the Assessment of Socio-Emotional Problems in Children and Adolescents (3). Prerequisite: SPS 5105. 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 5615. Counseling Children and Adolescents (3). Prerequisite: Instructor permission. 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.) 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.) Advanced supervised field experience in the delivery of school psychological services in an approved setting. May be repeated a maximum of eighteen semester hours.

Rehabilitation Counseling (MS)

The master's degree program is specifically designed to prepare graduate students to enter the field of rehabilitation counseling. It is a five semester, sixty semester-hour program. The curriculum provides for both the knowledge and skills necessary to be a rehabilitation counselor. One-third of the coursework involves development and application of skills in working with clients. Persons with the Master of Science (MS) degree typically are employed in state rehabilitation agencies, nonprofit organizations, and for-profit rehabilitation companies. Many students are hired during the full-time internship of their last semester.

The master's degree in Rehabilitation Counseling services is generally accepted in states that currently have counselor licensure laws. However, the completion of two to three years of appropriate supervised post-graduate clinical experience is required. Additional coursework may be required. Students who wish to seek licensure should consult the specific state standards and requirements. It is the student's responsibility to assure that their selected coursework and program of study meet licensing requirements.

Admission Requirements for Rehabilitation Counseling

All applicants must at least meet the minimum State Board of Education requirements for undergraduate grade point average and/or Graduate Record Examinations scores. Each degree offering may set different standards for admission based on programmatic objectives and the applicant pool. A formal application for graduate study must include the following: 1) official graduate application to Florida State University; 2) three letters of reference; 3) an autobiographical statement; 4) a current resume; and 5) a statement of how the degree sought can meet personal/professional goals. All items except the official graduate application should be sent directly to the program admissions committee. For information concerning particular degree offerings or admissions contact: *Program Coordinator; Rehabilitation Counseling, 3206 Stone Building, Florida State University, Tallahassee, FL 32306-4453*. International applicants must also produce a score of 80 on the Internet-based Test of English as a Foreign Language (TOEFL) or an equivalent score on an alternate TOEFL format.

Definition of Prefixes

MHS—Mental Health Services

RCS—Rehabilitation Counseling Services

Graduate Courses

MHS 5801r. Practicum in Counseling and Rehabilitation (4). Students receive intermediate training in counseling in the human services center, through direct client counseling, role play, instruction, and observation. May be repeated to 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). May be repeated to a maximum of twelve semester hours.

MHS 5915. Supervised Research (1–4). May be repeated to a maximum of five semester hours. A maximum of three semester hours may apply to the master's degree.

MHS 6610. Supervision (3). Development of skills in clinical and managerial supervision. Understanding a variety of supervisory models.

MHS 6805r. Advanced Group or Individual Counseling Practicum (4). 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 8980r. Dissertation (1–12). (S/U grade only.)

RCS 5080. Medical Aspects of Disability (3). This course offers an introduction to the US 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 5245. Psychosocial and Multicultural Aspects of Disability (3). This course explores the major theoretical perspectives and concepts of adjustment and adaptation to a disability and chronic illness. Social, cultural, and psychological factors of disability are viewed from a life-span perspective.

RCS 5250. Assessment in Counseling and Rehabilitation (3). This course offers an understanding of assessment approaches used with counseling and rehabilitation clients.

RCS 5320. Placement Methods and Techniques (3). This course offers an overview of major job placement approaches, including selective, consultative, and job seeking skills models. While applications to the employment of disabled persons is emphasized, these methods have implications for other hard-to-employ persons.

RCS 5410. Principles and Practices in Rehabilitation Counseling (3). This course provides an overview of the history, philosophy, theoretical concepts, intervention strategies, process, and legal ethical aspects of rehabilitation counseling.

RCS 5626. Administration and Supervision in Rehabilitation (3). This course offers an overview of rehabilitation administration and supervision both in public and private rehabilitation agencies.

RCS 5845r. Leadership Practicum in Rehabilitation (3–6). Individualized practicum experience in administration, teaching, or research. May be repeated to a maximum of twelve semester hours.

RCS 5930r. Special Topics in Rehabilitation (3). This course explores emerging issues in rehabilitation counseling, including developments in legislation, research, and policy and professional practice. May be repeated within the same term to a maximum of six semester hours.

RCS 6249. Advanced Psychological and Social Aspects of Disability (3). This seminar examines the major psychological and social theories related to adjustment and adaptation to a disability or chronic illness with emphasis placed on research, the applicability, and the efficacy of these theories.

RCS 6259. Advanced Assessment in Rehabilitation Counseling (3). This course explores theories and research related to assessment and evaluation procedures used in various rehabilitation settings. Emphasis is placed on psychological, medical, vocational, and ecological assessment procedures.

RCS 6400. Advanced Theories and Principles of Rehabilitation (3). This course provides an in depth and comprehensive examination of major approaches to counseling and psychotherapy in relationship to rehabilitation settings and individuals with disabilities.

RCS 6700r. Professional Issues in Rehabilitation Counseling (3). Facilitates students being knowledgeable and articulate discussants of current issues and trends in the field of rehabilitation. Emphasizes leadership development related to major policy trends and practices in the rehabilitation of persons with disabilities, as well as trends in rehabilitation education and professionalism. May be repeated to a maximum of six semester hours.

Department of ELECTRICAL AND COMPUTER ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Web Page: <http://www.eng.fsu.edu/ece/>

Chair: Simon Y. Foo; **Professors:** Arora, Baldwin, V. DeBrunner, Foo, Perry, Roberts, Zheng; **Associate Professors:** Andrei, L. DeBrunner, Harvey, Kwan, Li, Meyer-Baese, Tung, Weatherspoon, Yu; **Assistant Professors:** Edrington; **Assistant in Electrical Engineering:** Barnes, Hughes; **Associate in Electrical Engineering:** Brooks

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 as indicated in the "Graduate Faculty" chapter of this *Graduate Bulletin*. Current specialization areas supported include computer engineering, VLSI, computer security, electromagnetics, communications, digital signal processing and controls, power systems, robotics, and microelectronic engineering.

Facilities and Research 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 transportation and utility systems. The Center has developed an academic-industrial consortium focused on recent advances in power semiconductors, materials, advanced controls and superconductivity applied to power system technologies. CAPS is developing a national resource in power systems technology that is built around an extensive simulation capability which will provide both off-line and real-time simulation of power systems with major hardware-in-the-loop capability.

Major equipment and facilities include a multi-unit RTDS system, a 5-MW dynamometer, a 5-MVA AC-DC-AC converter, a 200-kV impulse laboratory, a superconductor ac-performance evaluation laboratory, and a multi-agent industrial control laboratory.

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. The lab aim is 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 is investigating fiber-optic sensors and switches, high-resolution imaging systems, opto-mechanical and interferometric sensors, and optical fiber characterization. The millimeter waves area is researching 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 & 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.

Sensor Systems Research Laboratory

The Sensor System Research Laboratory is currently engaged in radar, sonar and electromagnetic projects. Past projects have included radome design, radar target modeling, target detection and classification, target imaging, high-frequency scattering using the geometric theory of diffraction, radar absorbing materials, underwater mine detection using finite elements, synthetic aperture sonar simulators, signal processing, beam forming and ocean bottom imaging. Recently, the lab has been involved in radar signal design, SAS motion compensation and dust particle charging in the Martian atmosphere.

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 videotape. 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.

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

The department offers both thesis and non-thesis options for the Master of Science (MS) degree. The program includes common core courses, major depth concentration, and breadth in electrical engineering. A minimum of thirty semester hours of coursework and thesis are required for the thesis option, and thirty-three semester hours of coursework and master's comprehensive exam are required for the non-thesis option.

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 combined score on the verbal and quantitative portions of the GRE of at least 1000. International candidates must have earned a bachelor of science degree (or equivalent) in electrical engineering from a recognized non-U.S. academic institution, a grade point average (GPA) of at least 3.0 on a 4.0 scale for all work beyond the equivalent of sixty semester hours of undergraduate study (as evaluated by the admissions office) and a combined score of at least 1000 on the verbal and quantitative portions of the GRE, and a minimum score of 550 on the Test of English as a Foreign Language (TOEFL) if English is not their native language.

Note: Effective August 2011, the GRE Revised General Test replaced the current GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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.

Thesis and Coursework Requirements (Thesis Option)

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, before the defense presentation.

Students pursuing the thesis track must complete a minimum of thirty semester hours of coursework to satisfy the master of science (MS) degree in electrical engineering requirements. Twelve semester hours are required from the student's depth area, nine semester hours from the department's list of required graduate courses, three in supplemental electives and a minimum of six semester hours are required for the thesis (EEL 6971r). A minimum of three semester hours of supplemental electives should be a course in advanced mathematics, typically a 5000-level course, or a departmental approved substitute. Up to six semester hours of 4000-level courses can be completed on an S/U basis. The master's degree candidate may also be permitted to take up to six semester hours of 4000-level courses for letter grade credit beyond those required for a baccalaureate degree with the approval of the ECE graduate coordinator.

Students must identify their major professors by the end of the first semester of coursework and are required to submit a plan of study by the time they have completed twelve semester hours of graduate studies. The plan of study must be approved by the departmental graduate coordinator and the student's major professor. The student's major professor also will assist the student in forming the student's supervisory committee.

All Master of Science (MS) thesis program students are required to register for EEL 8976, Master Thesis Defense, and at least one semester hour of EEL 6971r, Thesis, during the semester they plan to graduate.

Supervisory Committee

The supervisory committee for a master's degree thesis program student consists of a minimum of three members of graduate faculty who hold master's directive status. At least half of the committee members must be faculty members from the ECE department.

Master's Thesis Defense Announcement

It is the student's responsibility to post the thesis defense announcement within the department and the College of Engineering at least two weeks prior to the defense. The announcement should include: thesis title; student's name; student's department; major professor and committee members; date and time and location of student's defense.

Coursework and Master's Comprehensive Exam Requirements (Non-Thesis Option)

All students in the non-thesis MS degree program must submit a formal request to obtain an official approval from his/her adviser (if applicable) and the ECE graduate coordinator to be exempt from the thesis requirement. The non-thesis option requires that the student complete a minimum of thirty-three semester hours of graded coursework beyond the baccalaureate degree. A minimum of three hours must be a course in advanced mathematics, typically a 5000-level course. Students choosing the non-thesis option must register for and successfully pass the required Master's Comprehensive Exam, EEL 8966. One repeat attempt will be permitted.

Transfer Credits

A maximum of six semester hours of letter-graded graduate coursework 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.

Graduate Seminar Requirement

All full-time Master of Science (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 below under "Graduate Courses."

Doctor of Philosophy

Admission to the Program

A bachelor's or master's degree in electrical engineering or a closely related discipline from an ABET-accredited institution is required for admission to the PhD program; international students may have a master's degree from a recognized international institution. A GPA of 3.3/4.0 on all baccalaureate coursework and any graduate work attempted, and a GRE score of 1100 are also required. These are minimums, and are normally surpassed by successful applicants. International students in addition must have demonstrated a minimum achievement of 550 on the TOEFL. Each successful applicant will be expected to have a faculty sponsor who will help the student to establish a plan of study.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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.

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 Doctor of Philosophy degree in the field and to facilitate counseling in the development of the student's program of studies.

Admission to Candidacy

The PhD program is divided into two parts: namely, requirements for a student to be formally admitted to candidacy for the degree, and requirements to satisfactorily complete the degree program.

In order to formally become a candidate and pursue research for the PhD degree, students must have demonstrated that they have a sufficient academic

foundation in electrical engineering, an understanding of the research process, and that they are knowledgeable enough about their chosen field of research to proceed with a reasonable assurance of success. If the student is successful in demonstrating these attributes, then the student may be admitted to candidacy for the PhD degree, and may begin formal research leading to the dissertation. The elements of this process are the following:

Doctoral Preliminary Examination

This examination is intended to determine the student's academic preparation for the PhD degree. It consists of a written examination covering the field of electrical engineering, including the areas of communications, digital systems, electromagnetics, electronics, power systems, signals and control. The exam should be taken during the second semester after admission to study for the PhD. The student must apply to take the examination in the Department of Electrical and Computer Engineering office by the end of the prior semester. One repeat attempt will be permitted. The examination must be passed within twenty-four months after beginning study for the PhD. Upon satisfactory completion of the doctoral preliminary examination, and upon the recommendation of the supervisory committee, the student will be formally admitted to candidacy for the doctoral degree. Registration for dissertation research then is permitted.

Dissertation Proposal and Prospectus Examination

After successfully completing the doctoral preliminary examination, completing the requirement for supervised research, and substantially completing all required courses, the student will prepare and present to the supervisory committee the proposed dissertation topic.

The oral examination is given to the student at the time of the presentation of the prospectus or proposed dissertation research area and topic. This examination will establish whether or not the student has sufficient expertise in the selected dissertation area to proceed with the planned research. One repeat attempt will be permitted.

Dissertation

The dissertation must be an achievement in original research constituting a significant contribution to knowledge, and must represent a substantial scholarly effort by the student. Upon completion of the dissertation, an oral defense is required, which consists of a public presentation of the work to the department and the supervisory committee. Students must register for EEL 8985r, Dissertation Defense, before the defense presentation. If the defense is satisfactory, the committee may then recommend award of the degree. Publication of the complete dissertation is required. This may be done in scholarly journals, or via University Microfilms.

Coursework Requirements

A doctoral degree candidate in electrical engineering must complete a total of seventy-two semester hours of coursework beyond those applied to the satisfaction of a bachelor's degree:

1. Completion of a minimum of thirty-six semester hours beyond those applied to the satisfaction of the undergraduate degree. A minimum of thirty semester hours must be completed on a letter grade basis, up to six semester hours can be completed on a S/U basis, for a total of thirty-six semester hours (minimum). All work completed to satisfy PhD degree coursework requirements must be 5000-level or above. These also must include nine semester hours from the department's list of required graduate courses, and six semester hours in advanced mathematics or advanced courses (5000-level or above) in an area outside of electrical and computer engineering beyond those semester hours applied toward any other degrees
2. Completion of three semester hours of work in EEL 5910r, Supervised Research, to demonstrate the ability to perform independent research prior to registering for dissertation research credit. This requirement may be waived at the recommendation of the major professor, if the student has completed a master's degree with a thesis option, and the major professor agrees that this satisfies the objective.
3. Completion of thirty-three semester hours (minimum) of dissertation research, EEL 6980r.

Supervisory Committee

The supervisory committee for a doctoral degree candidate consists of a minimum of three members of graduate faculty who have obtained doctoral directive status, one of whom is a representative-at-large of the graduate faculty drawn from outside the ECE department. Additional members may be appointed if deemed desirable. All members of the committee must hold at least the master's directive status. The major adviser or the co-adviser must be from the ECE department. At least half of the committee members must be graduate faculty members from the ECE department.

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 one week 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.

Transfer Credits

A maximum of thirty semester hours of letter-graded graduate coursework 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.

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. The details of the seminar are given below under 'Graduate Courses.'

Journal Paper Submission Requirement

All PhD students are required to publish, or submit and have under review at least one refereed journal article to a journal in their field of interest before their graduation will be approved.

Note: The graduate program in electrical engineering continues to evolve. Candidates are urged to contact the department to obtain the latest information regarding requirements and courses.

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: EEL 3135 and EEE 3300. 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 ICs (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 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.

EEL 5025. Computational Electrical Engineering (3). Prerequisites: CGS 3408, EEL 3135, 3472, 3512, and EEE 3300. The 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 4652. 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. 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 5416. Sonar (3). Prerequisites: EEL 3473, 3512. This course introduces basic concepts of sonar systems including acoustic propagation, transducers and projectors, target strength, reverberation, beamsteering, beamforming, beampatterns, and synthetic aperture sonar.

EEL 5426. RF/Microwave Circuits I (3). Prerequisite: Graduate standing or instructor permission. 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. 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, 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 4461. 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. 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. Principles of modern digital communication systems including pulse-code modulation, error-control coding, optimal signal protection, and information theory.

EEL 5542. Random Processes (3). Prerequisite: EEL 3135, 4021. 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.

EEL 5547. 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.

EEL 5563. Optical Fiber Communications (3). 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). Prerequisites: See department. 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 (3). Prerequisites: EEL 3135, 4021, 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. 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. 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 will be introduced.

EEL 5764. Computer System Architecture (3). Prerequisites: EEL 3705, 4746. 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). Prerequisite: Graduate standing. May be repeated to a maximum of six semester hours.

EEL 5910r. Supervised Research (1-5). (S/U grade only.) Prerequisite: 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 5930r. Special Topics in Electrical Engineering (3). 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.) Prerequisite: Graduate standing. Requires departmental approval and 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 6237r. 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 6502. Digital Signal Processing I (3). Prerequisite: EEL 5173. 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 6905r. Directed Individual Study (1-9). Prerequisite: Graduate standing. May be repeated to a maximum of nine semester hours within the same term.

EEL 6930r. Special Graduate Topics in Electrical Engineering (3). 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 to 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 (1-9). (S/U grade only.) Prerequisites: Graduate standing and instructor permission. A minimum of six semester hours of credit is required. Departmental approval required.

EEL 6980r. Dissertation (1-12). (S/U grade only.) May be repeated to a maximum of forty-eight semester hours.

EEL 8964. 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 to 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.

Department of ENGLISH

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.english.fsu.edu/>

Chair: Ralph Berry; **Eppes Professor:** Robert Butler; **Kellogg W. Hunt Professor:** Kathleen Yancey; **George Matthew Edgar Professor:** Gary Taylor; **Bertram H. Davis Professor:** Bruce Boehrer; **Janet Burroway Professor:** Mark Winegardner; **Robert O. Lawton Distinguished Professors:** S.E. Gontarski, David Kirby; **Professors:** Burke, Coldiron, Daileader, Fleckenstein, Goodman, Johnson, Montgomery, O'Rourke, Parrish, Roberts, Spiller, Suarez, Treharne, Walker; **Associate Professors:** Baggott, Belieu, Edwards, Epstein, Faulk, Gants, Gardner, Ikard, Kennedy, Kimbrell, Laughlin, McGregory, Moore, Neal, Saladin-Adams, E. Stuckey-French, Vitkus, Ward; **Assistant Professors:** Crucet, Fyfe, Gaines, Lathan, N. Stuckey-French; **Research Associates:** Coxwell-Teague, Schacoichis; **Associate in English:** Hambv; **Assistant in English:** Wells; **Professors Emeriti:** Bickley, Burroway, Crook, Fenstermaker, Lhamon, McElrath, Ortiz-Taylor, Rowe, Standley

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 fifty-plus years, hundreds of Florida State University English students have taken postgraduate degrees and have filled teaching and research positions in colleges and universities across the nation. The department is a charter member of the South Atlantic Graduate English Cooperative, an organization of thirteen MA and PhD degree-granting institutions in the region. 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.

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 faculty members have won University-wide teaching awards and three are named University Distinguished Teaching Professors. In addition to prize-winning original fiction and poetry, 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 as well as in the foremost professional journals, such as *Publications of the Modern Language Association (PMLA)*, *English Literary History (ELH)*, *American Literature*, *The Journal of Advanced Composition (JAC)*, and the *Journal of English and Germanic Philology (JEGP)*, *Journal of Modern Literature*, and *Modern Drama*.

Most students in the MA, MFA, and PhD programs emphasize literature, 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. Faculty and graduate students participate in a variety of interdisciplinary programs such as American studies and interdisciplinary humanities, and the department is the administrative home of a certificate program in publishing and editing and an interdisciplinary certificate program in critical theory (see the "Critical Theory" and "Certificate in Publishing and Editing" entries in this *Graduate Bulletin* for full descriptions of these programs). The English department is also home to the History of Text Technologies, an innovative interdisciplinary certificate program which combines studies in the history of the book and media cultures. Students can take the History of Text Technologies as an area of concentration for the MA and PhD.

In the MA program, students elect literature or rhetoric and composition concentrations. Masters students in literature 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. Masters 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 examinations 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 but advanced graduate students 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 without previous teaching experience 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**. 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 edit such scholarly journals as *College Composition and Communication*, *Frank Norris Studies*, *The Journal of Beckett Studies*, and *The Journal for Early Modern Cultural Studies*. Many students also gain journalistic experience by writing for the independent campus newspaper. The writing program sponsors weekly literary readings and an annual Spring Writer's Festival. The department also sponsors the World's Best Short Short Story contest, which attracts thousands of entries from around the world. Each fall, the literature faculty sponsors the English Colloquium, which features lectures by Florida State University and invited lecturers who present their most recent scholarship, and graduate students offer their first scholarly research at various university-sponsored colloquia.

The department annually recognizes outstanding achievements among its postgraduate students in both teaching and scholarship with the following awards and honors: the Bert and Ruth Davis Award for Outstanding Graduate Career; the George Harper Award for Outstanding Graduate Essay Writing; the Robert O. Lawton Award for Excellence in Teaching; the Fred L. Standley Award for Excellence in Teaching; the Marian C. Bashinski Award for Excellence in Teaching; the Bert and Ruth Davis Award for Outstanding Dissertation in English Literature, Criticism, or Rhetoric; the J. Russell Reaver Award for Outstanding Dissertation in American Literature or Folklore; the Ann Durham Award for Outstanding Creative Writing by an MA Student; the Academy of American Poets Graduate Award; and a departmental Award for Outstanding Graduate Creative Writing.

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 January 1st.

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.**

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

A candidate for the Master of Arts (MA) in English may elect to emphasize literature 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 advisers every term. The Director of Graduate Studies in English will serve as adviser to all first-term master's candidates or until another adviser 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 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 director of 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, Folklore, or Cultural Studies

Master's students who choose to emphasize literature 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 Director of 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

The MA Program in Literature with an Emphasis in Publishing and Editing

The Master of Arts in literature with an emphasis in publishing and editing is part of the Literature track or works in combination with the Literature and Rhetoric and Composition tracks. The degree requires a concentration of coursework that focuses on textuality, textual technologies, book history, the materiality of the book, or the mechanics of publishing—those courses that are part of the English Department's History of Text and Technologies (HoTT) program. This is a forty-five hour program that supplements the traditional academic MA with twelve additional credits, nine of which are non-degree credits in practical work and internships. That is, in addition to the thirty-three hours of course-work for the MA degree, students enrolled in the Publishing and Editing must:

1. Fulfill the general requirements for the MA in Literature with a minimum of a nine-hour concentration in the area of History of Textual Technologies.
2. Complete the Certificate in Publishing and Editing while pursuing the Literature MA Details for the Certificate in Publishing and Editing are available in the Graduate Student Handbook, the *Graduate Bulletin*, and on the English Department web page.

The program as a whole thus involves historical, theoretical, and practical coursework. It is designed for students interested in:

- studying publishing as an academic discipline—for example, its history and developing technology;
- exploring a career path other than that of teaching;
- developing supplemental skills in editing and publishing either to improve their own writing, or that of others; or
- understanding more fully the machinery of the publishing process.

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.**

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

In order to obtain the doctoral degree, students must successfully complete all coursework (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.

Each student must form a supervisory committee consisting of a major professor, two other members from the Department of English, and a representative from a related area. All committee members must have Graduate Faculty Status (GFS). The following are specific course requirements for the Doctor of Philosophy (PhD) 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 Director of 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 Masters 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".

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:

1. At least three semester hours from the following:
 - 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)
2. Up to nine semester hours from the following:
 - ENC 5217r Topics in Editing (3-6)
 - ENC 5945r Internship in Editing (1-6)
 - ENG 5906r Directed Individual Study (Editing Practicum) (1-3)
 - ENG 5998r Tutorial in English (Editing Practicum) (1-3)

For further details, contact the Director of Graduate Studies in English.

Certificate Program in Critical Theory

An interdisciplinary graduate program in critical theory is administered by the Department of English. For complete description, refer to the "Interdepartmental Certificate Program in Critical Theory" entry of this *Graduate Bulletin*.

Definition of Prefixes

AML—American Literature
 CRW—Creative Writing
 ENC—English Composition
 ENG—English: General
 ENL—English Literature
 LAE—Language Arts and English Education
 LIN—Linguistics
 LIT—Literature

Graduate Courses

AML 5017r. Studies in U.S. Literature to 1875 (3). Various approaches to the study of U.S. literature from the colonial period to 1875. May be repeated to a maximum of twelve semester hours provided each course carries a different subtitle.

AML 5027r. Studies in U.S. Literature Since 1875 (3). Various approaches to the study of U.S. literature from 1875 to the present. May be repeated to a maximum of twelve semester hours provided each course carries a different subtitle.

AML 5267r. Studies in Literature of the American South (3). Various approaches to the study of American southern literature from the colonial period to the present. May be repeated to a maximum of twelve semester hours provided each course carries a different subtitle.

AML 5608r. Studies in the African-American Literary Tradition (3). Various approaches to the study of literary works of Black American writers. May be repeated to a maximum of twelve semester hours provided each course carries a different subtitle.

AML 5296r. Studies in Multi-Ethnic Literature (3). Intensive study of a particular ethnicity, period, or topic in ethnic literature of the U.S. May be repeated to a maximum of twelve semester hours as topics vary.

AML 5637r. Studies in Latino/a Literature in English (3). 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 to a maximum of twelve semester hours as topics vary.

CRW 5130r. Fiction Workshop (3). Prerequisite: Instructor permission. Workshop emphasizes the development of the craft of fiction writing. Students are expected to work toward publication. May be repeated with instructor permission up to nine times for a maximum twenty-seven semester hours.

CRW 5331r. Poetry Workshop (3). Prerequisite: Instructor permission. Writing and revising of poetry. Students are expected to work toward publication. May be repeated with instructor permission up to nine times for a maximum of twenty-seven semester hours.

CRW 5430r. Drama Workshop (3). Prerequisite: Instructor permission. May be repeated with instructor permission nine times for a maximum of twenty-seven semester hours. Writing and revising of plays of varying length. Students are expected to work toward publication.

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). May be repeated with instructor permission nine times for a maximum of twenty-seven semester hours. For students working toward publication of expository writing. Course is structured with writer-editor relationship between student and instructor.

ENC 5700. Theories of Composition (3). A detailed investigation of topics in the teaching of college composition. The course will examine 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). 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). Basic concepts and methods of advanced literary study.

ENG 5028. Rhetorical Theory and Practice (3). Close study of classical and contemporary theory and its applicability to writing and teaching.

ENG 5049r. Studies in Critical Theory (3). 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). 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). 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. 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). 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 provided each course carries a different subtitle.

ENL 5216r. Studies in Middle English Language and Literature (3). 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 provided each course carries a different subtitle.

ENL 5227r. Studies in Renaissance Literature (3). 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). 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 provided each course carries a different subtitle.

ENL 5246r. Studies in British Romantic Literature (3). 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 provided each course carries a different subtitle.

ENL 5256r. Studies in Victorian Literature (3). Various approaches to the study of Victorian literature from 1830 to 1900. May be repeated to a maximum of twelve semester hours provided each course carries a different subtitle.

ENL 5276r. Studies in 20th-Century British Literature (3). Various approaches to the study of British literature since 1900. May be repeated to a maximum of twelve semester hours provided each course carries a different subtitle.

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). 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 provided each course carries a different subtitle.

LIT 5038r. Studies in Poetry (3). Various approaches to the study of poetry and poets. May be repeated to a maximum of twelve semester hours provided each course carries a different subtitle.

LIT 5047r. Studies in Drama (3). Various approaches to the study of drama and dramatists. May be repeated to a maximum of twelve semester hours provided each course carries a different subtitle.

LIT 5186r. Studies in Irish and/or Scottish Literature (3). Various approaches to the study of Irish and/or Scottish literature and culture. May be repeated to a maximum of twelve semester hours provided each course carries a different subtitle.

LIT 5235r. Studies in Post-Colonial Literature in English (3). 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 provided each course carries a different subtitle.

LIT 5309r. Studies in Popular Culture (3). 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 provided each course carries a different subtitle.

LIT 5327r. Studies in Folklore (3). 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 when topics vary.

LIT 5388r. Studies in Women's Writing (3). Various approaches to the study of women's writing and women writers. May be repeated to a maximum of twelve semester hours when topics vary.

LIT 5517r. Studies in Gender in Literature (3). 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 Middle and Secondary Education

ENGLISH LITERATURE:
see English

ENGLISH FOR NON-NATIVE SPEAKERS:
see Middle and Secondary 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

Graduate Certificate in EVENT MANAGEMENT

COLLEGE OF APPLIED STUDIES

Web Page: <http://appliedstudies.pc.fsu.edu/Academics/Graduate-Certificate-in-Event-Management>

Program Coordinator: Rosemary Prince

Events contribute to the quality of our lives enriching our communities by providing opportunities to celebrate our diversity and common bonds. From a three hour event designed to generate awareness for non-profit organizations, to multi-day conferences and exhibitions by professional associations, and week-long festivals in cities and towns, events touch the lives of many.

The event management professional must possess a unique combination of skills and techniques. The Graduate Certificate in Event Management program is designed to provide online advanced education to professionals employed in areas responsible for managing events in areas such as:

- event planning management
- parks and recreation
- communications
- business
- public relations
- marketing
- sport management
- non-profit management
- resort and commercial properties
- hospitality industry
- meeting planning
- association management
- federal, state, local government sectors

The program requires twelve semester hours of coursework that are offered online: LEI 5316, LEI 5317, LEI 5563, and LEI 5942. Courses provide students with advanced knowledge and practical experience for work in event management. The education and skills learned in the courses provide the latest techniques for today's event management professional.

Definition of Prefix

LEI—Leisure

Graduate Courses

LEI 5171. Philosophical, Social, and Behavioral Foundations of Leisure (3). An overview of philosophical, environmental, social, and psychological phenomenon of leisure and recreation such as socialization, motivation, attitude, satisfaction, boredom, and wellness. Scientific and philosophical explanations will be used.

LEI 5185. Current Issues in Leisure (1). Addresses the current issues facing the profession and the practitioner of leisure services.

LEI 5316. Event Planning Management (3). This is an advanced course in event management focusing 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 advanced course in event management focuses on issues and considerations in event planning ethics, risk management, and safety.

LEI 5530. Problems of Staff Development (3). 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). Analysis and evaluation of leisure systems, operations, programs, personnel, and fiscal resources from a quantitative and qualitative perspective.

LEI 5563. Event Marketing (3). This is an advanced course in event marketing that 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). Analysis of financial management policies and practices of leisure delivery systems.

LEI 5815. Leisure Education (3). Develop the knowledge and skill to enable student to conceptualize and design programs, services, and strategies to educate public for leisure.

LEI 5889. Research in Leisure Services (3). Critique of research, the sources and 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.) May be repeated to a maximum of four semester hours. A maximum of three semester hours may apply to the master's degree.

LEI 5930r. Special Topics in Recreation and Leisure (1-3). Topics of current or special interest in recreation and leisure services are studied in depth. May be repeated for a maximum of twelve hours.

LEI 5941. Practicum in Leisure Services (9). Full-time experience in a leisure agency under the supervision of a professional practitioner.

LEI 5942. Practicum in Events Management (3). Prerequisites: LEI 5316, 5317, 5563. This course provides students with an opportunity to apply knowledge, skills, and attitudes developed during their academic preparation. It is also aimed at helping 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). 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.) May be repeated to a maximum of five semester hours. A maximum of three hours may apply to the master's degree.

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.)

LEI 8976r. Master's Thesis Defense (0). (P/F grade only.)

Department of FAMILY AND CHILD SCIENCES

COLLEGE OF HUMAN SCIENCES

Web Page: <http://www.chs.fsu.edu/fcs>

Chair: Kay Pasley; **Eminent Scholar and Professor:** Fincham; **Professors:** Darling, Denton, Krantz, Ralston; **Associate Professors:** McWey, A. Mullis, Readdick, Rehm; **Assistant Professors:** Cui, Holtrop; **Associate in Family and Child Sciences:** Barlow; **Professors Emeriti:** Cornille, Dales, Greenwood, Hansen-Gandy, Hendrickson, Hicks, Lee, R. Mullis, Pestle, Rapp, Ridley-Bell, Zongker

A master's degree program is offered in the Department of Family and Child Sciences with a single emphasis in child and family relationships. Students may select a program of studies with either a thesis or course option. 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 course option and complete thirty-three semester hours including a three credit special project. In either the thesis or course option master's programs, three courses, or nine semester hours, may be taken on the 4000 level with departmental permission. These programs prepare students for careers in higher education, cooperative extension, state and local agencies, and private industry.

Two programs in the Department of Family and Child Sciences lead toward the Doctor of Philosophy (PhD) degree; one is in human sciences with an emphasis in family relationships, and the other is in marriage and family therapy. Each of these doctoral sequences may be combined with a secondary area of study. In keeping with college policy, there is no language requirement for doctoral students. Doctoral sequences in the department are designed for students who wish to pursue an academic career or conduct research in research centers at universities, at state and national agencies, or in the private industry. We believe that students best learn through active engagement in research and teaching. Our research expertise addresses three foci: relational development and enhancement in young adults, couples, and families; distressed families and relational interventions; and the link between parenting processes and relational outcomes.

A minimum of forty-eight semester hours of graduate coursework, exclusive of the dissertation, is required beyond the master's degree for the doctoral degree in human sciences with a major in family relationships. More than forty-eight hours are normally taken, because programs of study are individually developed. In addition to a broad range of subject matter courses, students are provided a solid foundation in research methodology and statistics. Unique opportunities and departmental supports are provided. Internships in human service agencies, education, business, private industry, and the State Cooperative Extension Service are available and encouraged, especially for master's students. The doctoral program in marriage and family therapy requires sixty-eight hours of graduate coursework, including a nine- or twelve-month clinical internship and exclusive of the dissertation. Coursework is recognized by the Commission on Accreditation for the Marriage and Family Therapy Education through the accreditation process. Departmental support includes a number of scholarships and awards that are available on a competitive basis. Applications can be obtained from the departmental office upon request.

Admission Requirements

In addition to the minimum admission requirements identified by the College of Human Sciences and the University, the department requires that students submit the following: 1) official copies of transcripts with degrees posted from colleges/universities previously attended; 2) official Graduate Record Examinations (GRE) score; 3) three letters of recommendation; and 4) a statement of professional goals for the master's program and professional goals and research interests for the doctoral 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 can be discussed prior to admission to the program. Students entering the doctoral program in marriage and family therapy also will need an affirmative recommendation by the faculty review committee. Masters students are admitted three times a year: Summer, Fall, and Spring. Doctoral students are admitted for Fall only.

Master's Programs in the Department of Family and Child Sciences

Major in Family and Child Sciences

Required Core Courses (ten semester hours):

- CHD 5266 Advanced Child Development (3)
 CHD 5617 Professional Development in FCS (1)
 FAD 5263 Advanced Family Studies (3)
 CHD 6261 Theories of Child Development (3)

OR

- FAD 6436 Theories of Family Science (3)

Required Research Courses (eleven to fourteen semester hours):

- CHD 5915 Methods of Research I (4)
 CHD/FAD 8966 Master's Comprehensive Examination (0)
 EDF 5400 Basic Descriptive and Inferential Statistics Applications (4) or
 FAD 5934 Seminar in Family and Child Sciences (3-9)
 CHD/FAD 5970 Special Project (3)

OR

- CHD/FAD 5971 Thesis (6)

Required Electives (six to twelve semester hours):

A minimum of five to six 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. A minimum of thirty semester hours is required for a degree with a thesis.

The balance of the coursework in the major is selected by the student in consultation with the student's major professor and supervisory committee. Students who elect to take the special project option must complete a minimum of thirty-three semester hours.

PhD Degree in Human Sciences with a Major in Family Relationships

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 forty-five semester hours of graduate work in addition to the dissertation is required beyond the master's degree.

Required Core Courses (twelve to fifteen semester hours):

- FAD 5481 College Teaching in Family Sciences (2-3)
 FAD 5617 Professional Issues in FCS (1)
 CHD/FAD 5942 Supervised Teaching (1-3)
 CHD 6261 Theories of Child Development (3)
 FAD 6436 Theories of Family Science (3)
 HOE 6366 Research Best Practices in Human Sciences (2)

Required Research and Statistics Courses (thirty-one to thirty-four semester hours):

- FAD/CHD 5912r Supervised Research (1-3)
 FAD 6917 Research Methods in FCS (3)
 CHD/FAD 6980r Dissertation (1-24)
 CHD/FAD 8964 Preliminary Doctoral Exam (0)
 CHD/FAD 8985r Dissertation Defense Examination (0)
 EDF 5401 General Linear Model Applications (4)

OR

- STA 5207 Applied Regression Method (3)

OR

- SOW 6418 Introduction to Linear Modeling for Applied. Soc. Research (4)

Required Data Analytic Electives (twelve semester hours)

Elective Courses within FCS (nine semester hours)

Other Electives (six semester hours)

Students lacking adequate background in FCS may be required to enroll in a series of leveling courses, the least of which include CHD 5266 (Advanced Child Development) and/or FAD 5263 (Advanced Family Studies).

PhD in Marriage and Family Therapy

Required Courses (twenty-four semester hours):

- FAD 5481 College Teaching in Family Sciences (2-3)
 FAD 5617 Professional Issues in FCS (1)
 CHD/FAD 5942 Supervised College Teaching (1-3)
 CHD 5266 Advanced Child Development (3) or
 FAD 5256 Parent and Child Relations (3)
 FAD 6436 Theories of Family Science (3)
 FAD 6930r Special Topics: Marital and Family Therapy - Topics Vary (3-9)

NOTE: This course is required for six credit hours

- HOE 6366 Research Best Practices in Human Sciences (2)

Required Research and Statistics Courses (thirty-six to thirty-seven semester hours):

- FAD 6607 Family Therapy and Services Research Methods I (3)
 FAD 6608 Family Therapy and Services Research Methods II (3)
 FAD 6917 Advanced Research Methods (3)
 FAD 6980r Dissertation (1-24)
 FAD 8964 Preliminary Doctoral Exam (0)
 FAD 8985r Dissertation Defense Examination (0)
 EDF 5401 General Linear Model (4)

OR

- STA 5207 Applied Regression Method (4)

Clinical Practice Requirements (twenty-seven semester hours):

- FAD 6606 Supervision in MFT (3)
 FAD 6940r Practicum in MFT (1-5)
 FAD 8944r Internship in MFT (1-12)

Data Analytic Electives (five to six semester hours)

All students must pass a preliminary examination prior to admission to 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 eighteen semester hours in research courses.

Marriage and Family Therapy

The Marriage and Family Therapy program offers major sequence courses related to marriage and family therapy that lead toward the PhD degree. Unique to this program is its integration in the Family and Child Sciences department and curriculum. Students must meet departmental admission requirements, as well as have an affirmative recommendation of a faculty review committee.

Definition of Prefixes

CHD—Child Development

FAD—Family

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 5619. Child Care Issues and Advocacy (3). Prerequisite: CHD 4225 or equivalent. This course examines issues of child care and child well-being within the broader socio-political context of North America.

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 Relationships

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 5456. Family Life Education (3). Prerequisite: Instructor permission. This course provides the information and techniques needed to facilitate and evaluate home, school, and community relations through the life span.

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 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 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 (3-9). 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 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. Family Therapy and Services Research Methods I (3). This course introduces the student to the application of the philosophy, rationale, and methodologies of program evaluation to the fields of family therapy and family services. It draws on examples of specific evaluations related to methodologies that will be discussed in the course.

FAD 6608. Family Therapy and Services Research Methods II (3). Prerequisite: FAD 6607. This course draws on program evaluation and family therapy clinical training research to prepare the student to use research methodologies in the fields of family therapy and family services. It will use examples of specific evaluations and practice exercises from clinical training in the field of marital and family therapy. Students are expected to apply the skills taught in an active evaluation of MFT training practices.

FAD 6917. 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 8966r. Master's Comprehensive 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.

HOE 6938r. Proseminar in Human Sciences (1-2). (S/U grade only.) Doctoral students only. May be repeated to a maximum of two semester hours.

FAMILY DEVELOPMENT:
see Family and Child Sciences

FILM:
see Communication; English; Latin American and Caribbean Studies; Modern Languages and Linguistics; Motion Picture Arts

FINANCE:
see also Multinational Business Operations

Department of FINANCE

COLLEGE OF BUSINESS

Web Page: <http://cob.fsu.edu/fin/>

Chair: William A. Christiansen; **Professors:** Ang, Clark, Coats, Humphrey, Lee, Dave Peterson; **Associate Professors:** Benesh, Cheng, Christiansen, Doran; **Assistant Professors:** Autore, Colak, Hutton, Jiang, Knill; **Associates in Finance:** Smith, Gary; **Assistants in Finance:** Doug Smith, Debbie Peterson, Tracy Stewart; **Fannie Wilson Smith Eminent Scholar in Banking:** Humphrey; **Bank of America Eminent Scholar in Finance:** Ang; **Patty Hill Smith Eminent Scholar in Finance:** Lee; **Wachovia Professor of Finance:** Peterson; **Robert C. Earnest Professor of Finance:** Coats; **Bank of America Professor of Finance:** Christiansen; **SunTrust Professor of Finance:** Benesh; **Gene Taylor/Bank of America Professors:** Cheng, Doran; **Cash Professors in Finance:** Autore, Jiang

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.

Master's Degree

The Master of Science in Finance (MS) is a one-year, lock-step program that emphasizes the applied aspects of finance. All students start in 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 deadline for receipt of all application materials is March 1st.

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 adviser 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 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). 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 5515. Investment Management and Analysis (1-4). 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 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.

FIN 5946r. Supervised Teaching (1-3). (S/U grade only.) Prerequisite: Consent of associate dean for academic programs. A maximum of three semester hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

FIN 5971r. Thesis (3-6). (S/U grade only.) A minimum of six semester hours is required.

FIN 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

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 (1-3). 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 (4). 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 (4). 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 6964r. Doctoral Preliminary Examination (0). (P/F grade only.)

FIN 6985r. 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 Middle and Secondary Education; Modern Languages and Linguistics

FRENCH LANGUAGE, LITERATURE IN TRANSLATION:
see Modern Languages and Linguistics

GENETICS:
see Biological Science

Department of GEOGRAPHY

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://www.coss.fsu.edu/geography/>

Chair: Victor Mesev; **Professors:** Elsner, Mesev, Steinberg; **Associate Professors:** Baker, Horner, Yang; **Assistant Professors:** Kobayashi, Pierce, Zhao; **Affiliate and Adjunct Faculty:** Fradel, Miller, O'Sullivan, Winsberg

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 working in the geography department investigate critical issues of society and the physical environment, including the linkages between global and local processes, a hallmark of geographic inquiry. Within this larger set of concerns, individuals in the department study and devise solutions for specific social and environmental issues ranging from hurricane activity, tropical deforestation, climate change and health care, to commuting, urban sustainability, water quality as well as natural and technological hazards.

The focus of departmental research is on geospatial modeling, policy analysis, and environmental hazards. Work under investigation includes transportation optimization, land use/land cover change, urban growth, environmental equity, the politics of representation, urban change, hurricane forecasting, and resource management. The department's foundation in geo-spatial sciences is built upon expertise in geographic information systems (GIS), remote sensing, and spatial analysis. Faculty active in this area specialize in theoretical developments in GIScience, quantitative methods and spatial modeling, as well as their applications to human and environmental issues, such as changes in urban morphology and transport infrastructure. The College of Social Sciences and Public Policy hosts a GIS laboratory with microcomputers running GIS, remote sensing, and statistical software. 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 GIS companies or private and public opportunities, such as the EPA, 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, environmental problems, or the interface between the two. Due to the close interaction between students and faculty in this specialized department, it is important that prospective students identify potential areas of concentration and the faculty members with whom they intend to study. While in residence, funded students gain credentials in teaching and research 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 or in academic journals.

Requirements

Applicants must hold a degree in geography or a related field from an accredited college or university, a baccalaureate degree in the case of students entering the master's program and a master's degree in the case of applicants to the doctoral program. 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 or a combined verbal/quantitative GRE score of 1000. 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). Current application instructions are available from the FSU Department of Geography Web site (<http://www.coss.fsu.edu/geography/>). Applicants are required to submit GRE scores, three letters of recommendation, a statement of intent, and a writing sample through the online Apply Yourself (AY) application portal described on the departmental Web page.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Master's Program

Non-Thesis Option

The non-thesis option master's program 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.

The coursework for the non-thesis option consists of a minimum of thirty-two semester hours. Students are required to take three core courses (nine semester hours total) 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)

In addition, each student selects at least eight elective courses (twenty-four semester hours total) in consultation with the major professor.

Thesis Option

The thesis option master's program 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.

The coursework consists of a minimum of twenty-four semester hours (plus a minimum of six thesis hours). 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)

In addition, each student selects at least five elective courses (fifteen semester hours) in consultation with the graduate adviser or major professor.

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. 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 GISci Option

The applied MS program in Geographic Information Science (GISci) is aimed at individuals who wish to cultivate a deep understanding of geospatial technologies in mapping and data analysis rather than a broad-based understanding of geography as a discipline. Students must earn thirty-two semester hours, including six semester hours in a capstone project. This fast-track option allows students to complete their degree in twelve months if they wish.

Required Courses. Students are required to take three core courses (fourteen semester hours) designed to provide a solid foundation for investigating geographic issues relating to social and environmental problems. A **capstone course** (six semester hours) is required of all MSGIS students during the last semester of residence. It is designed in consultation with a faculty member and demonstrates the student's skills by either developing an individual project or engaging in a work-related internship. It is offered only during summer terms. Students must earn a grade of "B" or better in each of the core courses:

GIS 5034 Introduction to Remote Sensing (3)

AND

GIS 5034L Introduction to Remote Sensing Lab (1)

GIS 5101 Geographic Information Processing and Systems (3)

AND

GIS 5101L Geographic Information Systems Lab (1)

GIS 5106 Advanced Geographic Information Science (3)

GEO 5934r Seminar in Current Topics (6)

In addition to the required courses, each student selects at least four elective courses (twelve semester hours) in consultation with the Applied GISci

Program Coordinator Dr. Xiaojun Yang, 321 Bellamy, (850) 644-8379, or xyang@fsu.edu, or visit the department's Web site at <http://www.coss.fsu.edu/geography/>.

PhD Program

For the doctoral program, the course requirements include the three courses required of the master's degree (if not taken previously), two additional core courses, and at least seven elective courses (twenty-one semester hours total.) All doctoral students must pass qualifying exams, including written and oral portions, for admission to candidacy for the doctoral degree. The supervisory committee determines passage or failure 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. At some point during one's doctoral study, a student must register for a total of twenty-four semester hours taken in a period of twelve consecutive months. 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.

Financial Assistance

The department offers a limited number of graduate assistantships. These are initially awarded for two semesters and generally entail a stipend of between \$13,000 and \$15,000. 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 research 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 on research projects, 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. Summer funding for course instruction (currently \$2,000 per course) is provided whenever possible. For more information, contact the Graduate Admissions Coordinator in the Department of Geography.

Definition of Prefixes

GEA—Geography: Regional Areas

GEO—Geography: Systematic

GIS—Geographic Information Systems

Graduate Courses

Note: Many courses are taught as seminars in current topics (see GEO 5934r below). Call the department for current offerings.

GEA 5195r. Advanced Area Studies (3). In-depth study of a particular world region, including Europe, Latin America, and East Asia.

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 5166. Advanced Quantitative Geography (3). Prerequisite: GEO 5165C. This course offers advanced spatial statistical methods and complex models applied to geographic phenomena, including spatial regression, smoothing, point patterns, kernel density estimations, and clustering algorithms.

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 5345. Disaster Preparedness and Hazards Mitigation (3). This course deals with natural hazards such as hurricanes and earthquakes and human-made hazards such as nuclear power and air pollution. The student will acquire perspectives, tools, and information to choose rationally among public policy alternatives regarding responses to environmental hazards.

GEO 5358. Environmental Conflict and Economic Development (3). Examines controversies over the use, transformation, and destruction of nature, including political ecology.

GEO 5377. Natural Resource Assessment and Analysis (3). This course traces the historical development of policies concerning natural resources from the colonial period to the present. Current issues in conservation and environmental management are discussed.

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 5414. Geospatial Data and Analysis (3). This course addresses topics in geographic theory, beginning with the history and social context of the field, including the debates over regions, urbanization, economy, population, development, and the role of markets and nation states. Each theoretical position is tied to method, both in terms of standard practices and critical challenges.

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 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 5555. World Systems Theory (3). Systematic interrogation of the birth and historical trajectory of the contemporary capitalist world economy, including dependency and modernization theory, and current topics in ethnic conflict 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 5705. Communications Geography (3). This course is an examination of the geopolitics of telecommunications, the space-shrinking impact of technologies, and their economic and social effects, including cyberspace.

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 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). Prerequisite: GEO 5934. This course focuses on quantitative approaches to the analysis of remotely sensed data. Digital multi-temporal, 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 5100. Advanced Geographic Information Systems (3). Prerequisite: GEO 5146. Students apply GIS to a problem from their own research or one supplied by a local government agency. Topics include environmental modeling, GIS spatial analysis and visualization.

GIS 5101. Geographic Information Processing and Systems (3). 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 5106. Advanced Geographic Information Science (3). Prerequisite: GEO 5159. 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 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 5400. Geographic Information Systems Applications in Social Sciences (3). 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.

GEOGRAPHY: REGIONAL

see Geography; *General Bulletin*: Latin American and Caribbean Studies

Program in GEOPHYSICAL FLUID DYNAMICS

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.gfdi.fsu.edu/>

Program Director: Kevin Speer; **Coordinating Committee:** Speer (EOAS/Oceanography); Nof (EOAS/Oceanography); Ye (Scientific Computing); **Professors:** Hussaini, Navon, Wang (Mathematics); Zou (EOAS/Meteorology); Clarke, Dewar, Huettel, Nof, Speer (EOAS/Oceanography); **Associate Professors:** Chan-Hilton (Engineering); Hu (EOAS/Geological Sciences); Muslimani (Mathematics); Bourassa, Cai, Clayson, Ruscher (EOAS/Meteorology); Ye (Scientific Computing); **Research Scientist:** Cain; **Associates Emeritus:** Kasha (Chemistry); Loper (EOAS/Geological Sciences); Howard (Mathematics); Barcion, O'Brien, Pfeffer (EOAS/Meteorology); R. Krishnamurti, Weatherly (EOAS/Oceanography)

Geophysical fluid dynamics is an interdisciplinary field of study whose primary goal is an improvement in our basic understanding of fluid flows which 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. The approach to this understanding is through mathematical, numerical, and experimental modeling and observational programs. 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 Atmospheric Science (EOAS), Mathematics, Physics, Scientific Computing, and Statistics, and the Schools of Engineering and Computational Science (SCS). 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 advisers 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 which 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 6-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.

The main computing facilities at GFDI consist of two Quad Core Intel Xeon Servers, a Quad Dual Core Opteron Server, six Dual Xeon workstations running a mix of Linux and Windows XP, and three terabytes of high performance disk space. This is complemented by several other modern workstations, laser-jet printers, scanners, and a robust network infrastructure. The GFDI computing environment includes access to an Inter-departmental cluster.

This is complemented by several other modern workstations, laser-jet printers, scanners, and a robust network infrastructure. The GFDI computing environment includes access to an Inter-departmental cluster.

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 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 science and mathematics portion of their baccalaureate degree work (or any graduate degree work they may have taken) and achieved a score of at least 1000 on the combined verbal and quantitative portions of the aptitude test of the GRE. Students expecting to receive financial assistance (see below) will need a significantly higher GRE score. Foreign nationals are expected to have a score of 550 or better on the TOEFL examination.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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 topics.

Engineering

Viscous fluid flows, turbulent flows, introduction to computational mechanics, water resources and environmental engineering, hydraulics, hydrology, and ground water.

Geological Sciences

Geophysics, geomechanics, geophysical methods, seismology, modeling of groundwater flow, hydrology.

Mathematics

Numerical analysis, vector and tensor analysis, ordinary and partial differential equations, matrix algebra, integral transforms and asymptotics, perturbation theory, hydrodynamic stability, wave propagation theory.

Meteorology

Atmospheric thermodynamics, atmospheric dynamics, large-scale atmospheric circulations, dynamical weather prediction, air/sea interaction, satellite oceanography.

Oceanography

Ocean waves, stability of geophysical fluid flows, ocean dynamics and circulation, coastal ocean dynamics, main ocean thermocline, turbulence.

Physics

Principles of thermodynamics, mechanics, electricity and magnetism, theoretical dynamics, electrodynamics, statistical mechanics.

Statistics

Computational methods in statistics, statistical procedures for the natural sciences, statistical inference, probability, multivariate analysis, stochastic processes, applied time series analysis.

Note: Description of the following courses can be found under the departmental listings.

Engineering

CEG 5125, 5415, 5515, 5635; EGM 5456, 5810, 6845; ENV 5045.

Geological Sciences

GLY 4451, 5425, 5455, 5465, 5556, 5573, 5575, 5825, 5826, 5827, 5868r.

Mathematics

MAA 4402; MAD 5708, 5738, 5739, 6408r; MAP 5207, 5217, 5345, 5346, 5423, 5431, 5441, 5512, 5513, 6434r, 6437r, 6939r.

Meteorology

MET 5311, 5312, 5340r, 5471, 5541r, 6308r, 6561r.

Oceanography

OCP 5056, 5253, 5271, 5285, 5551, 5939r.

Physics

PHY 4222, 4513, 5246, 5346, 5347, 5524.

Statistics

STA 5106, 5206, 5326, 5327, 5440, 5447, 5807r.

Definition of Prefix

GFD—Geophysical Fluid Dynamics

Graduate Courses

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 prior to 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.)

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 Middle and Secondary Education

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 erica.lee@cci.fsu.edu, call (850) 644-2253, or visit <http://www.commdisorders.cci.fsu.edu/>.

The School of Communication Science and Disorders administers the Interdepartmental Certificate Program in Developmental Disabilities. The purpose of this program 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. More than forty courses are available in the following disciplines: Art Education; Communication Science and Disorders; Family and Child Services; Middle and Secondary Education; Music Education/Therapy; Nursing; Nutrition, Food and Exercise Sciences; Physical Education; Psychology; Social Work; and Special Education. For additional information, please refer to the “School of Communication Science and Disorders” chapter in this *Graduate Bulletin*, e-mail linda.gessner@cci.fsu.edu, call (850) 644-9141, or visit <http://www.commdisorders.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, 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, please refer to the “Public Health” chapter in this *Graduate Bulletin*, e-mail william.weissert@fsu.edu, call (850) 644-4418, or visit <http://www.coss.fsu.edu/publichealth/>.

College of Nursing

The College of Nursing offers a Master of Science in Nursing (MSN) and a Doctorate of Nursing Practice (DNP). Graduates are educated for a variety of advanced practice nursing roles, with an emphasis on nursing education, health systems leadership, and nurse 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/Academic/>.

College of Human Sciences

The Department of Nutrition, Food and Exercise Sciences’ mission is to contribute to the prevention of chronic diseases through the conduct of 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 of chronic diseases. Florida State University was the first university to

develop a major in nutrition and fitness 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 level with options in nutrition and food science and exercise science. Master's students are trained as health practitioners in cardiac rehabilitation, exercise test technologists, dietetics, sports nutrition, fitness, nutrition education and health promotion, and as food scientists or technologists. Doctoral graduates are prepared for academic and nonacademic positions. For 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 <http://www.chs.fsu.edu/nfes/>.

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 concentrations in clinical practice, social policy, and administrative practice, and a Doctor of Philosophy (PhD), along with several certification and joint degree programs. For information, please refer to the "Social Work" chapter in this *Graduate Bulletin*, e-mail info@csf.fsu.edu, call (800) 378-9550 or (850) 644-4751, or visit <http://csf.fsu.edu>.

Certificate Program in HEALTH SERVICES ADMINISTRATION AND POLICY

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY AND COLLEGE OF BUSINESS

Web Page: <http://www.askew.fsu.edu/prospective/mpa/health.html>

Master of Public Administration (MPA)

The five-course professional option that is required for the master of public administration can be fulfilled through the health services administration and policy specialization. This specialization is designed to prepare students for management roles in a public sector environment concerned with the delivery of health services. In addition to the three core courses, two electives should be selected from a list of health policy- or administration-related courses in business, economics, human sciences, urban and regional planning, social work, sociology, and public administration and policy, in consultation with the director of the interdisciplinary specialization and the MPA program director.

Master of Business Administration (MBA)

The five-course option in health services administration and policy can be selected by MBA students as an area of specialization. This option is designed to prepare students for business and management roles in an environment concerned with the delivery of health services. The option can be fit within the electives that are required in the two-year MBA program. Students in the one-year option would need to attend an additional semester to complete the option. In addition to the two core courses, three electives can be selected from a list of health policy- or administration-related courses in economics, human sciences, public administration and policy, social work, sociology, and urban and regional planning, in consultation with the director of the interdisciplinary specialization and the MBA program director.

Required Courses for Both MBA and MPA Specializations

Note: Descriptions of the following courses can be found under the departmental listings.

- ACG 5505* Government and Not-for-Profit Accounting and Auditing (3)
- ECO 5936r Special Topics [Health Economics] (1-3). (Prerequisite: ECO 4101.)
- HSC 5603 Models of Health Behavior (3)
- PAD 5327* Public Program Evaluation (3)
- PAD 5605* Administrative Law (3)
- PAD 5846r Health Policy and Public Administration (3)
- PAD 5935r Seminar in Public Administration: Selected Topics (1-3) [Health Care Finance three credit hours]
- PAD 5935r* Seminar in Public Administration: Selected Topics (1-3) [Contracting three credit hours]
- SOW 5603 Social Work in Health Settings (3)
- SYA 6933r (or PAD 5935r) Selected Topics in Sociology (3)
- SYO 5545 The Changing Workplace (3)
- URP 5521 Epidemiological Bases of Health Planning (3)
- URP 5522 Regulatory Aspects of Health Care (3)
- URP 5524 Resource Allocation in Health Policy and Programs (3)

*Additional electives for public administration only.

Department of HISTORY

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.history.fsu.edu/>

Chair: Grant; **Associate Chair (Graduate Studies):** Creswell; **Associate Chair (Undergraduate Studies):** Liebeskind; **Professors:** Blaufarb, Gellately, Grant, Gray, J. Jones, M. Jones, Jumonville, McMahon, Wynot; **Associate Professors:** Creswell, Davis, Doel, Frank, Garretson, Harper, Herrera, Liebeskind, Piehler, Sinke, Stoltzfus, Upchurch, Williamson; **Assistant Professors:** Aviña, Hanley, Koslow, Mizelle; **Professors Emeriti:** Anderson, Bartlett, Betten, Bryant, Connor, Halpern, Horward, Keuchel, Lo, Moore, Oldson, Richardson, Ripley, Rogers, Rubanowice, Singh, Strait, Tannenbaum, Turner

In an effort to accommodate the best interests of graduate students, 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. The department offers strong graduate programs in selected areas of American, European, African-American, Middle Eastern, 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 in historical administration and public history which 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.

The department also participates in interdisciplinary programs in American studies, women's studies, humanities, 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. One former member was named Robert O. Lawton Distinguished Professor of History, the highest distinction the university faculty bestows on its members. Two members have been named Distinguished Teaching Professors, the highest distinction the University faculty bestows for teaching. Scholarly contributions by faculty are numerous and currently include over 100 books, the development of the second largest collection of Napoleonic source materials in the country, and several major research projects, including the prestigious multivolume *Black Abolitionist Papers Project*, and the Guadalajara Censuses 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 15,000 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 75 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.

The **Institute on World War II and the Human Experience** was created in 1997 to collect, preserve, and convey to classes and the public the experiences of the wartime generation. Housing thousands of letters, diaries, photos, and interviews, the Department of History's WWII Archives and Museum is the largest non-federal depository of such memorabilia in the country. The average American citizen's participation in all aspects of World War II (training, defense, production, combat, and discharge) is mirrored in the messages sent home to family and friends. In a remarkable fashion, this documentary legacy of the period 1938-1948, on both the home front and the front line, illustrates the nation's arming to defend itself as well as its broadening awareness of the world and its global responsibilities. The general public, students, and faculty

are welcome at the Institute's archives reading room and may make use of this unique collection to deepen their knowledge of the social history of the United States.

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 is strongly recommended as a prerequisite for MA degree 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) and before August 1, 2011 a minimum score of 1100 on the combined verbal and quantitative portions of the Graduate Record Examination (GRE). After August 1, 2011, verbal scores in the 82nd percentile range or higher are typical among successful candidates, though such scores provide no guarantee of acceptance. 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.

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, the student will complete a minimum of thirty-four semester hours of graduate work, six of which must be in HIS 5971r, Thesis. As part of the thirty-four hours, the student must take two seminars or colloquia (one of which must be in the major field), HIS 6934, Approaches to History, and 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 Historical Administration and Public History

Director: Jennifer Koslow, Assistant 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-six semester hours of graduate work. At least twenty of these hours must be taken on a letter-grade basis. As part of the thirty-six hours, the student must take HIS 5935, Special Topics in History and HIS 6059, Historical Methods and complete six internship credits. All HAPH students must also take at least two courses from the following four applied history courses: (HIS 5077, HIS 5082, HIS 5083, and HIS 6087). HAPH students must choose an emphasis area for their program of study. The emphasis areas offered are: Cultural Resources Management, Historical Records Administration, Southern History & Florida Studies, New Media & Public History, History Education, War and Society, and Museum Studies. A minimum of eight semester hours must be taken in the area of concentration. 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: Eight semester hours in HAPH courses: HIS 5067 and one of the following: HIS 5077, HIS 5082, HIS 5083, HIS 6087.

PhD: Fourteen semester hours in HAPH courses: HIS 5067: Public History, Theory and Methods, six credits in internship, and one of the following: HIS 5082, HIS 5083, HIS 5077, HIS 6087.

Master's in History: War and Society Emphasis

In addition to the standard presentation of military history, students are able to choose from a wide range of thematic offerings. Upon the completion of this degree, students might have studied the American "home front" during World War II, the Holocaust in Eastern Europe, the U.S. Civil War, and the more recent Middle Eastern conflicts. For additional details, see the department's graduate handbook.

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 immigration history, African-American history, intellectual history, or southern history. For European majors, students may select from 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, Africa, the Atlantic world, Latin America, the Middle East, Science/Environment, Medicine, and Native Peoples of the Americas. 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 HIS 6059 and HIS 6934; Teaching History at the College Level (HIS 6941) is strongly recommended. Doctoral students must also take five seminars or colloquia. In addition, the demonstration of reading proficiency in two foreign languages or of reading proficiency in one foreign language and competency in another approved research skill is required.

Definition of Prefixes

AFH—African History

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

African History

AFH 5308. Northern African History (4). This course will concentrate on the modern history of North Africa including: Maghrib, Morocco, Algeria, Tunisia, Libya, Egypt, Sudan, Ethiopia and Somalia. It is intended to provide an understanding of the background and problems of North African states today.

American History

AMH 5116. Colonial American History to 1763 (4). A study and comparison of the founding and development of the English colonies in North America.

AMH 5139. Revolutionary America, 1760-1788 (4). Examines the political, social and economic history of British America from the end of the Seven Years War to the ratification of the United States Constitution. Special emphasis will be given to the origins, course, and aftermath of the colonial rebellion that became the American Revolution, and which led to the founding of the United States. The course considers the fundamental causes of the Revolution and the many ways, some intended by the Founders but many not, in which the former colonies were transformed by the experience.

AMH 5177. The Civil War Era (4). In-depth study of the twenty years from 1845 to 1865. Emphasis will be placed on the coming of the Civil War, the secession crisis, and on both the military and nonmilitary events of the war years.

AMH 5229. U.S. Progressive Era, 1890–1920 (4). Includes a study of the development of domestic and foreign policy, the revolution of social thought, and the paradoxical path of reform in urbanized, industrial America. Devotes special attention to the nation's effort to accommodate old values with new realities.

AMH 5239. The United States, 1920–1945: Prosperity, Depression, and World War II (4). A course in United States history from 1920 through 1945 (i.e., a study of political, economic, diplomatic, social, and cultural/intellectual developments during that period).

AMH 5278. The United States Since 1945 (4). This course focuses on the political and cultural issues faced by the United States during the period of the Cold War (1945 to 1988). Special attention is given to postwar affluence, suburban America, the mass society, the movement from isolationism to interventionism, McCarthyism, the civil rights movement, social conflict in the 1960s and the rise of postwar conservatism.

AMH 5336. U.S. Intellectual History I: Beginning to 1880 (4). An interdisciplinary study of American thought from the Puritans to the late nineteenth century, asking, among other questions, what mission America assigned itself. Among the ideas examined will be Puritanism, the Revolutionary ideology, federalism, the American Enlightenment, romanticism, individualism, and manifest destiny.

AMH 5337. U.S. Intellectual History II: 1880 to the Present (4). An interdisciplinary study of the impact on American thought of social Darwinism, industrialism, naturalism, the culture of consumption, radicalism, anticommunism, post-industrialism, and affluence. Examines the growth of cultural criticism as a task required of the twentieth-century intellectual.

AMH 5404. The Old South (4). 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 5405. The South Since 1865 (4). Views the South both as a distinct region and as an area gradually coming back into mainstream American life after the Civil War. The unique problems of adjusting to defeat, the revolution in the labor system, and troubled race relations are considered.

AMH 5424. History of Florida From 1821 to the Present (4). A history of Florida from the period of its acquisition from Spain in 1821 until the present. The various "periods" in the state's past are discussed and major attention is given to the period 1920 to the present, the period of greatest growth.

AMH 5518. Twentieth-Century United States Foreign Relations (4). Students become acquainted with the major schools of interpretation regarding American foreign policy in the twentieth century and gain research and writing experience.

AMH 5555. American Legal History I (4). Surveys the history of the U.S. Constitution to 1800, including the British background, the first state constitutions, the Articles of Confederation, the Constitutional Convention, ratification debates, and first use of the Constitution in the 1790s. It concludes with the first major controversies faced by the founders; issues that the Constitution did not resolve for them easily. The course is not about constitutional interpretation or theories applied by the current Supreme Court.

AMH 5556. American Legal History II (4). This course surveys the history of both the U.S. Constitution and American law in the nineteenth century. Topics include the Marshall Court, slave law and the Dred Scott decision, the impact of the Civil War and Reconstruction on the law, and the effects of industrialization on American law. The course is not about constitutional interpretation or theories applied by the current Supreme Court.

AMH 5567. Women in 19th-Century America (4). This course examines the experiences of women in 19th-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. Women's contributions and quest for equality.

AMH 5576. Black America to 1877 (4). 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 (4). Traces the social, economic, cultural, and political activities of African-Americans from Reconstruction through the Civil Rights Movement.

AMH 5589. History of the Seminole Indians (4). This course offers an ethnohistory of the Seminole Indians in Florida from prior to their formation, in the eighteenth century, to present. The course focuses on the Indians themselves and their experiences, exposing students to the history of the Seminole's culture, lifestyles, religions, economy, and tribal community.

AMH 5635. Florida Environmental History (4). Applies the methods and approaches of environmental history to Florida, considering the changing relationships between human beings and the natural world through time. The field explores how nature has helped to shape culture as well as how humans have modified the natural world and transformed the land.

AMH 5636. North American Environmental History (4). This course introduces the changing relationships between human beings and the natural world in America through time.

AMH 5645. Humor and the American Mind (4). This course discusses American intellectual and cultural history from the eighteenth-century to the present, through the lens of humor. It investigates the relationship between American ideas and historical transformations. It uses humor to explore the connections and tensions between the various parts of the American mind.

Asian History

ASH 5226. Modern Middle East (4). An examination of modern Middle Eastern history, focusing on the origins of recent problems in the imperialistic era, the clash of political and cultural traditions, national rivalries, the impact of OPEC, the Palestinians, and the Iranian Revolution.

ASH 5266. Central Asia Since the Mongols (4). 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.

ASH 5529. Traditional India (4). Deals with the history of India from antiquity to the seventeenth century. Puts special emphasis not only on the study of Indian religions such as Hinduism, Buddhism, Jainism, and Sikhism, but also on the roles played by various important ancient and medieval kings.

Classical History

Note: The following courses are offered through the Department of Classics.

CLA 5438r. Studies in Greek History (3). 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). Critical study of topics related to the Roman Republic or Empire. May be repeated to a maximum of six semester hours.

CLA 5885. Roman Law (3). The detailed study of the principles and procedures of Roman law.

European History

EUH 5125. The Crusades (4). This course will provide a historical understanding of the material and spiritual bases for the reentry of Western Christendom into the Mediterranean world; the ways in which Crusaders organized, financed, and participated in Crusades and the impact this had on European institutions and thought; and the interrelations of Christians (East and West) and the Muslim world in the period of the Crusades.

EUH 5127. Earlier Middle Ages (4). Provides a survey of European history from c. 750 to c. 1200, from the origins of the medieval world in the Roman, Christian, and Germanic past through the gradual emergence of a distinctively European civilization to its first major period of expansion and accomplishment.

EUH 5128. Later Middle Ages (4). Provides a survey of European history from c. 1200 to c. 1450, from the height of medieval civilization in Europe through the crises of the late Middle Ages to the Recovery leading to a new age.

EUH 5146. The Renaissance (4). A study of the character of medieval Italy, the "problem" of the Renaissance, and a survey of economic, political, and cultural changes in Western Europe.

EUH 5147. The Reformation (4). An examination of the late Medieval Church, and the Protestant and Catholic Reformations in Europe from 1517 to the Peace of Westphalia in 1648.

EUH 5238. Rise of Nationalism (4). Analyzes the European struggle toward democracy and nationalism from the collapse of Napoleonic Europe to the establishment of the German Empire, emphasizing the development of liberalism, socialism, communism, etc.

EUH 5246. World War I: Europe, 1900–1918 (4). This course will cover 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 5249. The Holocaust in Historical Perspective (4). This course details the background and career of the Holocaust as well as the continuing problem of "Holocaust denial." Special emphasis is given to the ideas of such racists as de Gobineau and Hitler.

EUH 5285. Europe in the Cold War and Detente (4). Deals with the post–World War II era in Europe, tracing occupation policies, the division of Europe east and west, the development of the major European states, and the efforts to arrive at detente in respect to East–West tensions.

EUH 5338. History of East Central Europe, 1815 to the Present (4). 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 will be made to present issues within a comparative framework.

EUH 5365. The Balkans Since 1700 (4). The course of Balkan history emphasizing 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 5457. The Age of the French Revolution, 1715–1795 (4). A study of the eighteenth century and its transformation by the forces unleashed by the French Revolution. The radicalization of the Revolution is traced to the Terror and the overthrow of Robespierre's dictatorship.

EUH 5458. Napoleonic Europe, 1795–1815 (4). Traces the rise of Napoleon and his impact, political, social, economic, military, on France and Europe, culminating in his defeat at Waterloo.

EUH 5467. Nazi Germany (4). Deals with the background of the Nazi regime, the character of Hitler's dictatorship, and the origins and course of World War II in its European context. Also examined is National Socialism's impact on German institutions and racial consequences.

EUH 5508. England in the Middle Ages (4). History of England from Anglo-Saxon settlements to the establishment of the Tudor dynasty. Covers all significant aspects of life in medieval England, but emphasis is on the growth of English common law, the constitution, and administrative structures.

EUH 5509. Modern Britain Since c. 1870 (4). This course investigates the social, cultural, and political history of Great Britain from approximately 1870 to the present. Major themes include the evolution of class structures; new cultural trends; changing political culture, ideologies and institutions; and the relationship between these perspectives. Historiographical themes appropriate to the course will also be explored.

EUH 5518. Stuart England (4). This course is a study of England and Scotland under their joint sovereigns, the Stuart kings, from 1603 to 1714, as well as the parallel period of English rule in Ireland and the culture of the period.

EUH 5527. England, 1714–1870 (4). This course investigates the social, cultural and political history of Great Britain from 1714 to approximately 1870. Major themes include the evolution of social structures; new cultural trends; changing political culture, ideologies and institutions; and the relationship between these perspectives. Historiographical themes appropriate to the course will also be explored.

EUH 5548. Sex and Class in England, 1750–1914 (4). Offers students a perspective on the critical relations between class and gender in industrializing England, 1750–1914. Examines the lives and activities of English women, from the poorest to the wealthiest classes, against the background of the major dislocations occurring in British society during this period.

EUH 5578. 19th-Century Russia (4). 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 (4). 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 worlds superpowers in the 1980s.

EUH 5608. European Intellectual History, 1500–1800 (4). History of ideas documenting transition from "Medieval Mind" to "Modern Mind," including impact of four Renaissances, Protestant Reformation, Scientific Revolution, and Age of Enlightenment. Interdisciplinary approach includes philosophy, literature, art, political theory, science, economic thought, religion, and music.

EUH 5609. European Intellectual History, 1800 to the Present (4). History of ideas in the last two hundred years, exploring the nineteenth century as Age of "Isms" (including Liberalism, Conservatism, Communism, Romanticism, Idealism, Nationalism, Industrialism, Imperialism, Positivism, Darwinism, Historicism) and establishing the twentieth-century as an Age of Crisis in which traditional Western Civilization disintegrates.

HIS 5256. War and the Nation State (4). This course examines the phenomenon of war in its broader social-political-economic context from a historical and comparative perspective.

HIS 5265. War and Society In the Age of Revolution (4). 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.

Latin American History

LAH 5439. History of Mexico (4). Covers the history of Mexico from the great Indian empires to the present, emphasizing the nineteenth and twentieth centuries. Deals with the cultural and social history as well as political movements. Also treats Mexican historiography.

LAH 5475. History of the Caribbean (4). A survey of the history of the Latin American Caribbean. Special attention given to such topics as the Cuban Revolution and recent United States–Puerto Rican relations.

LAH 5727. Race and Class in Colonial Latin America (4). Comprehensive examination of Latin America from 1492 to 1830, with emphasis on native and African reactions to colonial rule and the creation and growth of multi-ethnic groups and their solidification into classes.

LAH 5749. Social Revolutionary Movements in Latin America (4). 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.

Historical Administration

HIS 5067. Public History Theory and Methods (4). This course offers an overview of the different specialties of public history, the historic preservation movement in the US, archives, history museums, oral history, commemoration, and the use of new media for public presentations of history.

HIS 5082. Introduction to Archives (4). The nature of archives; various types of records; arranging and processing archives; restoring and protecting records; archival institutions, policies, and procedures.

HIS 5083. Introduction to Historic Preservation (4). The identification, preservation, and maintenance of historic sites; the historic preservation movement.

HIS 5084. Museum Management (4). A study of the organizational dynamics and multifold management concerns of history museums.

HIS 5085r. Internship in Historical Management (4–8). (S/U grade only.) 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 eight 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 6087. Museum Studies and Practice (4). This course comprises 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.

Others

HIS 5077. Oral History (4). 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 (4). This course offers specialized approaches to history. Topics will vary. This course 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 (4). 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 6469. Historiography and Science (4). This course introduces graduate students to the range of scholarship within the history of science and reveals the full sweep of the study of science and society by examining studies of various scientific disciplines and time periods.

HIS 6500. History of Life Sciences (4). This course considers the development of life sciences from 1750 to the present. It introduces students to critical problems related to biology and society through the study of primary and secondary sources.

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 (4). 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 (4). Graduate students only. 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.)

WOH 5226. The Worlds of Captain Cook (4). This course explores the social and cultural worlds of the great eighteenth-century British navigator, James Cook. Specifically, the course explores the places where Cook went, the social world of the British Navy, the ethnohistorical dynamics of British-Native interactions in the Pacific, as well as Cook's legacy for the British and for the peoples of the Pacific.

WOH 5238. Disease, Race, and Environment (4). This course examines the close relationship between disease, race, and environment in the development of civilizations of the world.

WOH 5246. World War II (4). 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.

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 Textiles and Consumer Sciences

Program in HISTORY AND PHILOSOPHY OF SCIENCE

COLLEGE OF ARTS AND SCIENCES

Web Page: <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 interesting 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 75 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

HIS 6500 History of Life Sciences

Required Philosophy Courses*

PHI 6455 Philosophy of Biology: Basic Topics

PHI 6457r Philosophy of Biology: Selected Topics

Other Possible Courses*

AMH 5636 North American Environmental History

EXP 5406 Conditioning and Learning

WOH 5238 Disease, Race and Environment

PHI 5934r Topics in Philosophy

PHI 6406r Philosophy of Science

PHI 6935r Seminar in Philosophical Topics

Elective Courses*

- HIS 5932r Science and American Political Culture
 AMH 5337 US Intellectual History II: 1880 to the Present
 PHI 5135 Modern Logic I

***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 Ariel Davidson, Program Assistant, at (850) 644-7248 or visit <http://hps.fsu.edu>.

Definition of Prefixes

HPS—History and Philosophy of Science

Graduate Courses

HPS 5340. Freud and the Invention of the Modern Mind (3). This course explores Freud's life, work, and legacy against the backdrop of the histories of science. The course is built around the close reading of key Freudian texts and is divided into three thematic sections. The first section, Freud as Detective, examines Freud's case histories and clinical reflections. The second section, Freud as Archaeologist, studies Freud's attempt to excavate the psychological complexity of everyday life. The third section, Freud as Critic, scrutinizes Freud's macro-sociological theorizing.

HPS 5345. Power, Knowledge and Control: Foucault and the History of the Human Sciences (3). This course is built around a systematic reading of Foucault's provocative historical and philosophical reflections on the "all-too human" history of the human and social sciences. Readings include recently-published lectures from Michael Foucault's tenure at the College de France, as well as texts that have become classics, such as *Order of Things* and *Discipline and Punish*.

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.

Dedman School of HOSPITALITY

COLLEGE OF BUSINESS

Web Page: <http://dsh.fsu.edu/>

Director and Robert H. Dedman Professor: Jane Boyd Ohlin; **Professors:** Bonn, Brymer, Harris, Kim; **Associate Professors:** Ohlin, Lanford **Assistants in Hospitality:** Farr, Koenigsberg, Gonzalez; **Cecil B. Day Professor of Lodging Management:** Brymer; **Robert H. Dedman Professor in Service Management:** Bonn; **Robert H. Dedman Professor in Hospitality Management:** Kim

The program in hospitality management was established in 1947 in recognition of the demand for hotel and restaurant industry executives, with the objective of providing the kind of education tomorrow's hospitality leaders will need. The curriculum is designed so that students must meet high standards of achievement in general education and must acquire not only the specialized knowledge needed for their hospitality industry careers, but also understand the basic functions, objectives, and tools of management that are common to executive roles.

The Dedman School of Hospitality is located in the South Building of the *University Center*, which provides for the specialized academic/training objectives established by the school. In addition to classrooms, this state-of-the-art facility provides hospitality students with teaching kitchens, a technology center, a publication resource center, and a placement center. The building also contains an affiliated 35,000 square-foot, professionally managed city club that provides hospitality students with real-world food and beverage experience in elegant surroundings.

The Dedman School of Hospitality also houses one of a select group of professional golf management (PGM) majors accredited by the Professional Golfers Association (PGA). The Don Veller Seminole Golf Course and the Dave Middleton Golf Complex are home to the PGM major. A state-of-the-art training facility, a pro shop, restaurant, faculty offices, and classrooms complement the 18-hole golf course.

One of the most rewarding benefits of an education in hospitality management or professional golf management at Florida State University is that through the years a personal, intimate, congenial climate, in which students may develop to their fullest potential, has remained a chief attraction. All of the school's energies and resources are devoted exclusively to preparing each student for a professional career.

The Dedman School of Hospitality is nationally and internationally recognized as one of the best. Many firms visit the school each year to interview students for entry-level management positions. Graduates of the program enjoy top managerial and ownership positions in clubs, restaurants, hotels, resorts, institutions, and other facets of the hospitality and golf industries. The requirement of practical, on-the-job experience, where the student applies classroom knowledge to the workplace, prepares the Dedman School of Hospitality graduate for the operational challenges of industry.

The Dedman School of Hospitality does not offer any advanced degrees.

Definition of Prefixes

HFT—Hospitality Management

Graduate Courses

HFT 5477. Financial and Cost Control Systems for Hospitality and Tourism Organizations (3). This course offers an in-depth analysis of corporate financial statements, financial feasibility, asset valuation, financial projections, tax environments, and capital acquisition in hospitality and tourism organizations.

HFT 5506. Services Marketing and Research for Hospitality and Tourism Organizations (3). This course examines marketing and service industries within the context of the services marketing mix and the implementations of service strategies in the hospitality and tourism industry.

HFT 5697. Legal Environment of Hospitality and Tourism Organizations (3). This course analyzes the basic concepts of law applied in the hospitality and tourism industry as related to employees, suppliers, guest relationships, liability, and other legal issues.

HFT 5756. Convention Services and Events Management (3). This course provides a comprehensive approach to managing, marketing, and planning conventions, special events, meetings and conferences.

HFT 5908. Studies in Hospitality and Tourism (3). This course provides graduate students the opportunity to explore subjects of interest which are not offered within the existing list of courses.

HOUSING AND COMMUNITY DEVELOPMENT:
 see Urban and Regional Planning

HUMAN SCIENCES, GENERAL COURSES:
 see College of Human Sciences

Program in Interdisciplinary HUMANITIES

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://iph.fsu.edu/>

Program Director: John Kelsay; Graduate Adviser: Shannon Tucker; Graduate Teaching Supervisor: Kathryn Cashin; Undergraduate Adviser: Kathryn Stoddard

Effective as of December 2009, the Program in Interdisciplinary Humanities is suspending admission into the American and Florida Studies major for all new students.

The Master of Arts (MA) program provides a graduate liberal studies degree program in the Humanities and the Arts. The doctoral program, leading to the Doctor of Philosophy (PhD) degree in Humanities, is designed to offer qualified students a broad program combining offerings from the participating departments of Anthropology, Art History, Classics, Communication, Dance, English, History, Modern Languages and Linguistics, Music, Philosophy, Religion, and the School of Theatre. These programs provide an enlarged perspective assisting in an understanding of the significance of the specialized disciplines in the humanities area.

All graduate students are required to make an appointment with the program director to approve coursework for the following term.

Please refer to the department Web site at <http://dih.fsu.edu> for additional information pertaining to graduate programs in Humanities.

Requirements for the Interdisciplinary Master's Program in 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 Interdisciplinary Humanities Program offers a thirty-three semester hour non-thesis program with the following requirements.

Admission

The following criteria must be met to be admitted to the master's program: 1) an undergraduate major in one of the humanities area departments; 2) a Graduate Record Examination (GRE) score of 1000 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.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Requirements

1) Nine semester hours in HUM 5227, 5245, and 5253; 2) twelve semester hours of courses focusing on a specific cultural period or theme; and 3) twelve semester hours of HUM 6939r or other appropriate courses as listed below. **At least one** of these seminars or courses must focus on literary analysis, criticism, history or appreciation (LIT); at least **one** must focus on analogous aspects of art history (ARH); and at least **one** must focus on analogous aspects of music (MUS). When appropriate HUM 6939r seminars are not offered, one of the following courses may be selected:

Literature

ENG 5049r Studies in Critical Theory
ENG 5138r Studies in Film
LIT 5017r Studies in Fiction
LIT 5038r Studies in Poetry
LIT 5047r Studies in Drama

Art History

Any graduate course in art history that is open to non-majors.

Music

MUH 5380 Music in the Humanities (or any graduate level music course that is open to non-majors)

Other Requirements

In addition, certification of competency in reading a foreign or classical language is required. The master's degree requirements are fulfilled through regular coursework. On an extremely rare occasion, relating to emergency circumstances, the director of the program may approve a directed individual study (DIS) in lieu of regular coursework.

Requirements for the Doctoral Program in Humanities

Please review all college-wide requirements summarized in the "College of Arts and Sciences" chapter in this *Graduate Bulletin*.

Admission

Typically, incoming doctoral students have a Master's degree in one of the participating humanities area departments before admission to the doctoral program. Students with MA degrees in Interdisciplinary Humanities or Fine Arts may be admitted to the doctoral program by permission of the Chair with the understanding that they will complete, in one departmental area acceptable to the Humanities Program, the equivalent number of courses required for an MA degree in that department. Students with non-humanities oriented MA degrees are required to complete an MA degree in Humanities or in one of the participating humanities area departments before being admitted to the doctoral program. Three letters of recommendation are required by the Humanities Program as part of the application process. Students are admitted to the program on the recommendation of the Admissions Committee of the Program in the Humanities and the Chair of the department of the student's concentration. A minimum cumulative score of 1000 or higher is required on the Graduate Record Examinations (GRE) and a minimum grade point average of 3.0 or higher on all work previously attempted.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Requirements

The PhD comprises a total of forty-eight credit hours of study. In consultation with the Chair, doctoral students choose one of two sequences at the required 5000 level. Most students take a chronologically oriented sequence that is fulfilled by completing the HUM 5227, 5245, and 5253 sequence. Students who have already completed work that is equivalent to this sequence take one that aims at a topical and methodological approach toward intellectual history, comparative literature, and the fine arts and may be fulfilled by completing (with the approval of the Chair) a sequence of nine semester hours of courses such as the following: ARH 5795, HIS 5346, MUH 5380, or PHI 6808r and other related courses.

Doctoral students are also required to select a total of three seminars designated HUM 6939r offered by the Humanities Program. With permission from the Chair, a student may be permitted to substitute one or more seminars in their departmental area. HIS 5346 or LIT 5066r may be substituted for one of the seminar requirements. **At least one** of these seminars or courses must focus on literary analysis, criticism, history, or appreciation (LIT); at least **one** must focus on analogous aspects of art history (ARH); and at least **one** must focus on analogous aspects of music (MUS). When appropriate HUM 6939r seminars are not offered one of the following courses may be selected:

Literature

ENG 5049r Studies in Critical Theory
ENG 5138r Studies in Film
LIT 5017r Studies in Fiction
LIT 5038r Studies in Poetry
LIT 5047r Studies in Drama

Art History

Any graduate course in art history that is open to non-majors.

Music

MUH 5380 Music in the Humanities (or any graduate level music course that is open to non-majors)

Other Requirements

In addition to the required Humanities courses, a student will take approximately one-half of his or her coursework in the department of concentration (including the work taken at the Master's level) and the remainder in a carefully selected cluster of courses offered by participating departments in a major chronological period and a cultural theme, or in a major and minor chronological period. The major chronological period requires eighteen semester hours of work, and the minor period or theme requires twelve semester hours of work.

After finishing thirty semester hours of graduate work or being awarded the Master's degree, the doctoral student must be continuously enrolled at Florida State University, Tallahassee campus, for a minimum of twenty-four graduate semester hours in any period of twelve consecutive months. The residency requirement can be completed with either coursework or dissertation hours.

In most instances, students should assume that two years of full-time residence beyond the Master's degree is required to fulfill course requirements. Upon completion of all coursework, written examinations, and oral examina-

tions, an additional twenty-four semester hours of dissertation hours are required. A reading knowledge of two modern or classical languages or, at the discretion of the student's supervisory committee, a high level of competence in one modern or classical language is required.

Definition of Prefixes

HUM—Humanities

Graduate Courses

HUM 5227. The Humanistic Tradition: Greek and Roman (3). Studies in the thought, values, and arts of Greek and Roman culture.

HUM 5245. The Humanistic Tradition: Medieval, Renaissance, and Baroque (3). Studies in the thought, values, and arts of Western culture from the early Christian era through the Renaissance and baroque periods.

HUM 5253. The Humanistic Tradition: The Modern World (3). Studies in the thought, values, and arts of modern Western culture.

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 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

HUM 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

HUM 8985r. Dissertation Defense (0). (P/F grade only.)

INDUSTRIAL/APPLIED PSYCHOLOGY:
see Psychology

Department of INDUSTRIAL AND MANUFACTURING ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Web Page: <http://www.eng.fsu.edu/ime/index.php?page=main>

Chair: Chuck Zhang; **Professors:** Awoniyi, Braswell, Liang, Wang, Zhang; **Associate Professors:** Okoli, Zhang; **Assistant Professors:** Liu, Park, Vanli, Zeng; **Adjunct Professor:** Moshir

The Department of Industrial and Manufacturing Engineering offers two graduate degree programs: Master of Science (MS) and Doctor of Philosophy (PhD). 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 integrated products, manufacturing processes, and systems design; CAD/CAM; robotics; artificial intelligence in engineering; precision machining and metrology; rapid prototyping; composite material processing; quality control; quality engineering; manufacturing systems analysis; set-covering theory; simulation environments; supply chain management; and engineering management.

Research Facilities

The Department of Industrial and Manufacturing Engineering provides an excellent environment for instruction and research. The department has seven laboratories: Advanced Material Processing, Applied Robotics and Ergonomics, Automated Systems, Composite Manufacturing and Testing, Computer Integrated Manufacturing, Precision Manufacturing, and Quality Engineering. Each lab is equipped with state-of-the-art research and instructional equipment. For example, the manufacturing lab includes full-size and table-top robots and CNC machines, as well as software for data acquisition, simulation, and process monitoring and control. Students have access to the 44,000 sq. ft. state-of-art labs at Florida State University's High-Performance Materials Institute (see <http://www.hpmi.net>).

Students have access to computer facilities, which include SUN workstations and servers, IBM-compatible Pentium-based PC's and high performance engineering workstations. The department offers access to a wide variety of software, including CAD/CAM simulation, optimization and database management programs. Software development environments supporting research activities are maintained. In addition, the College of Engineering computing facilities support a SUN cluster with fifteen Ultra Sparc Systems and LAN Manager environment.

The Florida State University Computing Center operates a 4-processor CRAY YMP-4 and other high performance computing systems. FAMU participates in an Army-funded High-Performance Computing Research Consortium operated by the University of Minnesota, through which students have direct access to high performance supercomputers located on the University of Minnesota campus. Several engineering faculty members have a joint appointment with the National High Magnetic Field Lab.

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 specialization in engineering management does not require a thesis. *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,

AND

MAC 2313 Calculus with Analytic Geometry III

OR

MAS 3105 Applied Linear Algebra

OR

equivalent course as determined by the graduate committee.

AND

ESI 3312C Operations Research I: Deterministic

OR

ESI 4313 Operations Research II: Nondeterministic

OR

equivalent course as determined by the graduate committee

AND

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
- Minimum scores of at least 650 on the quantitative portion and 400 verbal portion of the GRE

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

- A minimum score of 80 (iBT) on the TOEFL (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 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 course, 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.ie.eng.fsu.edu>.

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 of the two universities.

Non-Thesis Option

Under exceptional circumstances, students may be allowed into the MSIE non-theses 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. The following are the core courses for the non-thesis option:

EIN 5622 Computer-aided Manufacturing (3)

EIN 5936 Graduate Seminar (0)

ESI 5247 Engineering Experiments (3)

ESI 5408 Applied Optimization (3)

ESI 5417 Engineering Data Analysis (3)

ESI 5451 Project Analysis and Design (3)

ESI 5525 Modeling and Analysis of Manufacturing and Industrial Systems (3)

[Choose one]

ESI 5223 Statistical Process Control (3)

OR

ESI 5228 Introduction to ISO 9000 (3)

Specialization in Engineering Management

Students are expected to complete thirty-three semester hours of course work, and will not complete a thesis. 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 700 on the Quantitative portion and 450 on the Verbal portion of the GRE

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

3. Have a minimum score of 580 on the TOEFL (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)

MAD 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)

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/ESI 5412, Applied Optimization; and ESI 5525, Modeling and Analysis of Manufacturing and Industrial Systems.

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.

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. 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 represent a 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.

Definition of Prefixes

EGN—Engineering: General

EIN—Industrial Engineering

EMA—Materials Engineering

ESI—Industrial/Systems Engineering

Graduate Courses

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 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 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 5459. Concurrent Engineering (3). Prerequisite: Graduate or senior standing with instructor permission. Concurrent product and process design. Product life cycle attributes. Design for manufacturing. Quality function deployment. Concurrent engineering project management topics. Case studies and design exercises.

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 5623. Computer-Aided Process Planning (3). Prerequisites: CGS 3408, EGN 2123, EIN 3390C, and EIN 4312. Course covers the role of process planning and computer-aided process planning (CAPP), development of CAPP, configuration of CAPP systems, input approaches of CAPP systems, process routing planning, machining operations design, variant CAPP systems, generative CAPP systems and artificial intelligence in CAPP.

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 (1-6). Prerequisite: Instructor permission. Topics in industrial engineering with particular emphasis on recent developments. May be repeated to a maximum of six (6) 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 (1-6). (S/U grade only.) Prerequisite: Approval by department. Each master's thesis shall be supervised by a master's degree supervisory committee. Completed master's thesis shall be presented to the department in the form of a written report and a seminar. May be repeated to a maximum of nine semester hours.

EIN 8976r. Master's Thesis Defense (0). (P/F grade only.)

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.

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 5417. Course provides an introduction to designing experiments and analyzing the results. It is intended for engineers and scientists who perform experiments or serve as advisers 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 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.

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 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.

Doctoral

EIN 6629. Tolerancing and Metrology for Precision Manufacturing (3). Prerequisites: EIN 5398, 5408. Theory and applications of tolerancing techniques in precision machining. Topics include tolerance representation, tolerance stack-up, tolerance analysis and synthesis, statistical tolerancing, coordinate measuring machines, form error evaluation algorithms, and advanced topics in form error assessment. Case studies and design exercises.

EIN 6980r. Dissertation (3–24). (S/U grade only.) Prerequisite: Doctoral candidate standing. Mandatory class for all PhD seeking students. May be repeated to a maximum of forty-eight semester hours.

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.

INDUSTRIAL/APPLIED PSYCHOLOGY: see Psychology

Department of INTERIOR DESIGN

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Web Page: <http://interiordesign.fsu.edu/>

Chair: Lisa Waxman; **Professors:** Waxman, Wiedegreen; **Associate Professors:** Butler, Munton, Myers, Pable; **Assistant Professors:** Dawkins, Ransdell; **Professors Emeriti:** Koenig, Ohazama

The Department of Interior 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 first professional degree consists of sixty-seven semester hours. This program is designed for students with undergraduate degrees in areas other than interior design or architecture.

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 specialized research to enhance professional 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 six hours of thesis. It is primarily intended for individuals who will eventually pursue careers in higher education, specialized research, or 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 (if available), three letters of recommendation, a resumé, letter of intent, 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. See department for details.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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). Prerequisite: IND 5425. Advanced analysis and planning of interior environments. (Studio.)

IND 5236. Graduate Studio II (3). Prerequisite: IND 5435. Advanced comprehensive design projects.

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). Prerequisites: 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 metrics. Emphases are on technological presentation techniques and systematic design development from concept to construction documents.

IND 5280. Graduate Studio V (3). Prerequisites: IND 5634. This studio culminates in the creation of student-generated design projects focused on the conceptual and schematic phases of project development.

IND 5281. Graduate Studio VI (3). Prerequisites: IND 5280. This studio culminates in the creation of student-generated design projects focused on the design development phase and on project documentation. Emphasis is placed on visual and verbal presentation.

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 5476. Computer-Aided Design I (3). Prerequisite: IND 5425. This class 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). Prerequisite: IND 5476. 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). Prerequisites: IND 5236 and IND 5477. This studio course focuses on the generation of a comprehensive set of specifications and construction drawings.

IND 5508. Professional Practices (3). Prerequisite: IND 5236. 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.) Corequisite: IND 5236. 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 5634. Pre-Design Research and Programming (3). 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.)

Program in INTERNATIONAL AFFAIRS

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://www.coss.fsu.edu/inaprog/>

Director: Lee K. Metcalf (Social Sciences); **Director of Undergraduate**

Studies: Jason Jordan (Political Science); **Director of International Economic**

Education: Onsurang Norrbm (Economics)

International Affairs is an interdepartmental program leading to the degrees of Master of Arts (MA) or Master of Science (MS). Courses are to be selected from the participating departments of Anthropology, Economics, Geography, Political Science, History, Philosophy, Religion, Sociology, Urban and Regional Planning, and the School of Public Administration and Policy. Courses from outside the participating departments, for example, from the College of Law and the College of Business, may be credited toward the degree as long as the course hours do not exceed ten semester hours. Dual degree programs are also offered in cooperation with the College of Law and the Department of Urban and Regional Planning.

Most students in the program anticipate careers in government, business, international organizations, journalism, or teaching, although the program can serve as a stepping stone into more specialized doctoral programs, usually within one of the disciplines represented by the nine participating departments and one school. 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 program'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, and Moscow. A fall program is also available in London. 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 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. Internship placements are also available in Brussels, Paris and other European cities. All internships must be approved in advance by the program director.

Requirements

A candidate is admitted to the program by meeting the University's general requirements for graduate admission and by recommendation of the director and executive committee of the program. It is recommended that the student have undergraduate preparation in those fields where graduate work is contemplated. All applicants must take the Graduate Record Examinations (GRE) (verbal and quantitative aptitude portions) prior to admission to the program.

The student may choose between a thirty-two semester hour program or a thirty semester hour course and thesis 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 semester hour; INR 5012, Problems of Globalism for three semester hours; and INR 5938, Joint Seminar in International Affairs for three semester hours
2. At least nine, but no more than eighteen, semester hours in one of the participating departments and school
3. Coursework in at least three of the participating departments and school
4. At least six hours focusing on the developing or post-Communist world (i.e., outside of the United States, Canada, Western Europe, Japan, Australia, and New Zealand)

Ten semester hours in the thirty-two, or eight in the thirty hour program, may be selected from outside the participating departments and school with the director's approval.

Up to eight semester hours in the thirty-two hour program, or six in the thirty hour program, may be 4000 level courses, if no 5000 level equivalent is offered by that department or school.

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; 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.

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

Note: A description of the following courses can be found under "Graduate Courses" in this chapter.

- INR 5012 Problems of Globalism (3)
 INR 5935r Special Topics [Colloquium] (1-3)
 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* Blackboard *Organization* site as well as the program office in 211 Bellamy.

Anthropology

- ANG 5266 Economic and Ecological Approaches in 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 5478 Cultural Evolution (3)
 ANG 5491r Seminar in Social Anthropology (3) [Topics vary]
 ANG 5493 Core Seminar in Cultural 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)
 ECS 5335 Economics in Transition (3)

* Consult with instructor and see course description for required prerequisite coursework

Geography

- GEA 5195r Advanced Area Studies (3). (Various regions)
 GEO 5358 Environmental Conflict and Economic Development (3)
 GEO 5425 Cultural Geography (3)
 GEO 5472 Political Geography (3)
 GEO 5555 World Systems Theory (3)

History

- AFH 5308 Northern African History (4)
 AMH 5278 United States Since 1945 (4)
 AMH 5517 United States Foreign Relations to 1900 (4)
 AMH 5518 Twentieth-Century United States Foreign Relations (4)
 AMH 5564 Women in Modern America (4)
 ASH 5226 The Modern Middle East (4)
 ASH 5266 Central Asia Since the Mongols (4)
 ASH 5529 Traditional India (4)
 ASH 5559 Modern India (4)
 EUH 5238 The Rise of Nationalism (4)
 EUH 5246 WWI: Europe, 1900–1918 (4)
 EUH 5249 The Holocaust in Historical Perspective (4)
 EUH 5285 Europe in the Cold War and Détente (4)
 EUH 5338 History of East Central Europe, 1815 to the Present (4)
 EUH 5365 The Balkans Since 1700 (4)
 EUH 5457 The Age of the French Revolution, 1715–1795 (4)
 EUH 5458 Napoleonic Europe, 1795–1815 (4)
 EUH 5467 Nazi Germany (4)
 EUH 5509 Modern Britain Since c. 1870 (4)
 EUH 5578 19th-Century Russia (4)
 EUH 5579 20th-Century Russia (4)
 EUH 5608 European Intellectual History, 1500–1800 (4)
 EUH 5609 European Intellectual History, 1800 to the Present (4)
 HIS 5256 War and the Nation State (4)
 LAH 5439 History of Mexico (4)
 LAH 5475 History of the Caribbean (4)
 LAH 5727 Race and Class in Colonial Latin America (4)
 LAH 5749 Social Revolutionary Movements in Latin America (4)
 WOH 5226 The Worlds of Captain Cook (4)
 WOH 5238 Disease, Race, and the Environment (4)
 WOH 5246 World War II (4)

Philosophy

- PHH 5505r 19th Century Philosophy (3)
 PHH 5609r Contemporary Philosophy (3)
 PHI 5665 Core Course in Ethics (3)
 PHI 6425r Philosophy of Social Sciences (3)
 PHI 6607 Ethics (3)
 PHM 6205r Social and Political Philosophy (3)

Political Science

- CPO 5091 Core Seminar in Comparative Government and Politics (3)
 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 5014 Contexts and International Relations (3)
 INR 5036 International Political Economy (3)
 INR 5088 International Conflict (3)
 INR 5137 Politics of Terror (3)
 INR 5934 Selected Topics (3)

Public Administration

- PAD 5376 Introduction to Terrorism (3)
 PAD 5377 Advanced Topics Terrorism (3)*
 *requires prerequisite course PAD 5376

Religion

- REL 5195r Seminar: Religion and Culture (3)
 REL 5305r Seminar: History of Religions (3)
 REL 5332 Modern Hinduism (3)

- REL 5354r Special Topics In Asian Religion (3)
 REL 5545 Modern Protestantism (3)
 REL 5565 Modern Roman Catholicism (3)
 REL 5616 Modern Judaism (3)
 REL 6176r Seminar: Ethics and Politics (3)*

*Students in international affairs should get permission of the instructor before registering for this course.

Sociology

- 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 5424 Sustainable Development Planning in the Americas (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 5614 Population and Development Planning (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)

Definition of Prefixes

INR—International Relations

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 (1–3). (S/U grade only.) May be repeated to a maximum of twelve semester hours. Subject varies with each student.

INR 5910r. Supervised Research (1–3). (S/U grade only.) May be repeated to a maximum of five semester hours. Subject varies with each student. A maximum of three hours may apply to the master's degree.

INR 5935r. Special Topics (1–3). (S/U grade only.) Topics vary. May be repeated as topics change.

INR 5936r. Special Topic in International Affairs (1–3). Topics vary. May be repeated as topics change to a maximum of nine 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.)

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

LAW

COLLEGE OF LAW

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

Professors: Atkinson, Christie, Craig, Dodge, Griffith, Hirsch, Hsu, Johnson, Kahn, Logan, Markell, Seidenfeld, Stern, Utset, Weidner; **Associate Professors:** Alces, Bridgeman, Falaschetti, Lee, Markel; **Assistant Professors:** Bayern, Fontaine, Kesten, Landau, Linford, Pursley, Spottswood, Tolson, H. Wiseman, S. Wiseman; **Research Associates in Law:** Annino, Blenkhorn, Gertz, Krieger, Stone; **Associates in Law:** LaVia, Matthews, Taylor; **Edward Ball Eminent Scholar:** Abbott; **Tobias Simon Eminent Scholar:** Tesón; **Professors Emeriti:** Banoff, Dickson, Ehrhardt, Kennedy, Larson, Morse, Oeltjen, Powell, Schroeder, Southerland, VanDercreek, Van Doren, Vinson, Yetter

The College of Law prides itself on providing a superb legal education with a strong liberal arts orientation and creating a culture in which students and faculty can study and learn in a collegial atmosphere. The College of Law values a close working relationship among students and faculty. In the classroom, faculty members integrate into the study of law insights from such diverse disciplines as history, philosophy, psychology, sociology, economics, and finance. Outside of the classroom, the faculty members actively work with students on projects such as law journal manuscripts, moot court, mock-trial competitions, and directed independent studies. 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 5532, LAW 5700, LAW 5792, LAW 5793, and LAW 7750.

Definition of Prefix

LAW—Law

Graduate Courses

LAW 5000. Contracts (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 5532. Legislation and Regulation (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 (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 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 6020. Commercial Paper (2-3). 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 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 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. Business Associations (4). 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, stockholder's representative actions.

LAW 6062. Agency and Partnership (2-3). A study of the basic principles of agency and partnership law, including limited partnerships, limited liability partnerships, and limited liability companies.

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 6260. 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 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 6315. Arbitration (3). Basic introduction to the law and process of arbitration.

LAW 6321. Remedies (3). Prerequisites: LAW 5000, 5400. 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 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 6321. Remedies (3). Prerequisites: LAW 5000, 5400. 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 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 6430. Gratuitous Transfers (4). Prerequisite: LAW 5400. 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 wild-life law. May be repeated to a maximum of five semester hours.

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 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 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 6571. Intellectual Property I (2-3). A survey of patent, trademark, and unfair competition law.

LAW 6572r. Intellectual Property II (2-3). Recommended prerequisite: LAW 6571. 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 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 6670. Real Estate Transactions (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 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 6703. Advanced Torts (2-3). Prerequisite: LAW 5700. Advanced study of contemporary tort law and policy, focusing in depth on the jurisprudential and economic foundations of injury compensation generally and in the context of several particular tort law doctrines.

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 6794. Writing Skills (3). A workshop to develop and refine writing skills in legal contexts.

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 7054. Bankruptcy Policy Seminar (2). Prerequisite: LAW 7050. Advanced study of selected topics regarding bankruptcy law and policy.

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. Constitutional Criminal Procedure I (2-3). Advanced study of selected federal constitutional constraints on the law enforcement evidence-gathering and investigative process.

LAW 7113. Constitutional Criminal Procedure II (2-3). Advanced study of selected federal constitutional constraints on the criminal justice adjudicatory process.

LAW 7116. Florida Criminal Practice (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 7252. Comparative Criminal Procedure (2-3). Perspectives course. Study of the procedural rights of those accused of crime comparing U.S. jurisprudence with that of England, Wales and other British Commonwealth authorities.

LAW 7262. International Trade (2-3). Prerequisite: LAW 6260. 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 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 7451. Estate Planning (2). Prerequisites: LAW 5400, 6430, 6620. 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 7504. Supreme Court Roleplay (2-3). Prerequisite: LAW 5501. Roleplaying 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 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 7581. Sports Law (2). Advanced study of state and federal laws relating to the business of amateur and professional sporting competition as entertainment.

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 7795. Advanced Writing Skills: Appellate Briefs (2). Prerequisites: LAW 5792, 5793. Advanced skills course designed to strengthen students' analytical, writing, and research skills, using appellate advocacy as the context.

LAW 7805r. LLM Writing Project (3). (S/U grade only.) This course is designed for students completing the LLM in Environmental Law and Policy to remain matriculated at the College while completing their capstone project. Course may be repeated with instructor permission to a maximum of six semester hours.

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 litigation. May be repeated to a maximum of four 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 (1-5). Prerequisite: Instructor permission. Consideration of special legal areas not included elsewhere in the curriculum. Credit is, and enrollment may be, determined by the instructor. May be repeated within the same term to a maximum of five semester hours.

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

School of LIBRARY AND INFORMATION STUDIES

COLLEGE OF COMMUNICATION AND INFORMATION

Web Page: <http://slis.fsu.edu/>

Director: Corinne Jörgensen; **Professors:** K. Burnett, Dennis, Gross, C. Jörgensen, McClure, Riccardi; **Associate Professors:** G. Burnett, Douglas, Everhart, Kazmer, Latham, Marty; **Assistant Professors:** C. Hinnant, Lustria, Mardis, Mon, Oh, Rodriguez-Mori, Stvilia, Urban; **Other Personnel:** Barrager, Brooks, Doffek, Gibradze, L. Hinnant, P. Jörgensen, Koontz, Kotrla, Marks, Randeree, Swaine; **Professors Emeriti:** Aaron, Blazek, Conaway, Depew, Hart, Hunt, Jahoda, Logan, Robbins, Summers, Trezza

The multi- and inter-disciplinary domains represented in library and information studies 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, and preserved. We live in an increasingly interconnected information world, with technologies such as the Internet, personal computers, and wireless devices significantly changing how we connect people and information.

The School of Library and Information Studies (LIS) offers myriad opportunities to facilitate people's need for information with complex and highly sophisticated technology. A critical function of the information professions is to 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 reliable, robust, affordable, and flexible. Information professionals ensure that people can access the information they want and need within the context and concerns of security and privacy, intellectual property, and information policy.

The School of Library and Information Studies at Florida State University is one of the top-ranked information studies programs in the nation. Its creative and innovative programs draw upon well-established traditions, and dynamically evolve within the ever-changing global networked society.

Established in 1947 as a professional school, the School of Library and Information Studies offers both undergraduate and graduate education. The master's degree program in library and information studies is accredited by the American Library Association, and the school is a member of the Association for Library and Information Science Education (ALISE). The school was authorized to offer the Doctor of Philosophy (PhD) degree in 1968 and the Specialist degree in January 1997.

The school's faculty are highly visible in professional organizations and societies, professional conferences, and publications, as well as in conducting significant research. Their professional and academic activities translate directly into a rich, intellectual environment that amply prepares students for their future career options. Our graduates are well prepared to work in a variety of information environments, including libraries, government agencies and corporations, as well as within any organization that has a significant need to bring people and information together.

Stipulations for All Incoming Graduate Students

Laptop Computer Requirement for Main-campus Students. All main-campus graduate students in the School of Library and Information Studies are required to provide their own laptop computer and appropriate software. Students not enrolled on the main campus may use a desktop or laptop computer, but must ensure their equipment meets the standards for online learning. Specific information about technical requirements may be found on the school's Web site, at <http://slis.fsu.edu>.

Synchronous Activities for Online Courses. Online courses typically meet for a scheduled day/time each week, during which students participate in 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.

Master's Degree Program

In the master's degree programs, students will gain the basic theoretical foundation, knowledge, and introductory skills necessary to function effectively in professional positions in the field of library and information studies. Students will interpret the role of the information profession and will be aware of its conceptual framework as a basis for their practice in a variety of information environments in a multicultural society:

1. Students will demonstrate knowledge of historical foundations of LIS as they interpret the present and future roles and functions of information professionals in relation to the environments in which they operate.
2. Students will demonstrate knowledge of the basic principles of professionalism to analyze critically their roles and establish future directions for the profession.
3. Students will demonstrate basic knowledge of the functions and activities that commonly take place in the information field and will place these activities in a rational framework within the appropriate information environment.
4. Students will become acquainted with major information environments and recognize the similarities, differences, and interrelationships of these settings.
5. Students will gain knowledge of techniques and skills that underlie basic information activities, and, in selected areas, more advanced techniques.
6. Students will develop the ability to adapt to changing demands and opportunities for information provision in society, including the application of current techniques and technologies.
7. Students will begin to analyze, evaluate, and articulate a professional philosophy based on an integrated view of the role of the information profession in society and the role of the information professional in helping individuals and groups effectively fulfill their information needs.

Graduate Programs Available

- Master of Science (MS)
- Master of Arts (MA)
- Specialist (Post Master's)
- Juris Doctor (JD) / Master of Science (MS)
- Doctor of Philosophy (PhD)
- Certificate Programs

Master of Science (MS) Program

The Master of Science (MS) degree requires successful completion of thirty-six semester hours of graduate coursework. Students must take four core courses from among the areas of professional foundations, information organization, policy, research methods, user needs assessment, and management for career-planning purposes, and choose additional courses either from one or more areas of specialization or by designing an individualized program of study that best meets their career goals. Courses are offered in three broad concentrations: information architecture and technology, information needs and services, and youth information needs and services. The current areas of specialization include general librarianship, information organization, leadership and management, reference and instruction, school media, technology and networking, Web design, and youth services. Additional specializations are developed according to professional needs. For more information about the MS program, visit <http://slis.fsu.edu/Graduate-Program/Master-of-Science-Degree>.

Master of Arts (MA) Program

A Master of Arts (MA) degree may be earned by students who complete the requirements for the Master of Science degree and an additional 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. In addition, they must demonstrate proficiency in a foreign language. For more information about the MA program requirements, visit <http://slis.fsu.edu/Graduate-Program/Master-of-Arts-Degree>.

Admission Requirements – Master of Science (MS) and Master of Arts (MA) Programs

In order to be considered for admission to the MS or MA program, a student must:

1. Possess a baccalaureate degree from a regionally accredited college or university.
2. Present proof of an earned minimum grade point average of 3.0 (on a 4.0 scale) in all work attempted while registered as an upper-division undergraduate student working toward a bachelor's degree from a

regionally accredited institution; or an earned minimum grade point average of 3.0 (on a 4.0 scale) on a completed master's degree from a regionally accredited institution.

- Present official test results from a nationally standardized graduate admission test, such as the General Test of the Graduate Record Examination (GRE), the Graduate Management Admission Test (GMAT), or the Miller Analogies Test (MAT). On August 1, 2011, Educational Testing Services (ETS) implemented a revised form of the GRE with a different scoring mechanism than the prior GRE. To accommodate these changes and ensure comparability between old and new versions of the GRE, the School of Library and Information Studies will consider and evaluate the percentiles associated with applicants' reported GRE scores in making admissions decisions. As a guide, the school looks for applicants to have a GRE percentile of at least 50 on each of the verbal and quantitative portions of the test. Based on ETS estimates, we prefer quantitative scores of at least 149 (scores achieved August 1, 2011 or later) or 630 (score achieved prior to August 1, 2011), and verbal scores of at least 150 (scores achieved August 1, 2011 or later) or 450 (score achieved prior to August 1, 2011) and a preferred writing score of 4.0 (for all GRE exams).

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 Library and Information Studies are:

- Paper based Test of English as a Foreign Language (TOEFL):** 585 total / 61 writing
- Internet based TOEFL (IBT):** 94 total / 24 writing
- International English Language Testing System (IELTS):** 6.5

International graduate applicants seeking teaching assistantships are required to pass a test of spoken English.

Specialist (Post Master's)

The Specialist degree is a post-master's degree designed for students who are interested in gaining knowledge in new areas within the field of information studies. The focus of the program is to improve and develop new skills and additional competencies in the field. The program is planned cooperatively with faculty advisers 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 at the completion of the program. For more information about the Specialist program, visit <http://slis.fsu.edu/Graduate-Program/Specialist-Post-Master-Degree>.

Admission Requirements – Specialist Degree

To be considered for Admission to the Specialist program, a student must:

- Present proof of an earned 3.2 grade point average (on a 4.0 scale) on a completed master's degree from a regionally accredited college or university.
- Present official test results from a nationally standardized graduate admission test, such as the General Test of the Graduate Record Examination (GRE), the Graduate Management Admission Test (GMAT), or the Miller Analogies Test (MAT). On August 1, 2011, Educational Testing Services (ETS) implemented a revised form of the GRE with a different scoring mechanism than the prior GRE. To accommodate these changes and ensure comparability between old and new versions of the GRE, the School of Library and Information Studies will consider and evaluate the percentiles associated with applicants' reported GRE scores in making admissions decisions. As a guide, the school looks for applicants to have a GRE percentile of at least 50 on each of the verbal and quantitative portions of the test. Based on ETS estimates, we prefer quantitative scores of at least 149 (scores achieved August 1, 2011 or later) or 630 (score achieved prior to August 1, 2011), and verbal scores of at least 150 (scores achieved August 1, 2011 or later) or 450 (score achieved prior to August 1, 2011) and a preferred writing score of 4.0 (for all GRE exams).

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 Library and Information Studies are:

- Paper based Test of English as a Foreign Language (TOEFL):** 585 total / 61 writing

- Internet based TOEFL (IBT):** 94 total / 24 writing
- International English Language Testing System (IELTS):** 6.5

International graduate applicants seeking teaching assistantships are 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 Library and Information Studies gives preference for admission to applicants who meet the minimum University requirements for both the GPA and the GRE.

School Library Media Specialist Certification Admission Requirements

Applicants for the master's degree who plan to seek school library media specialist certification must meet the University's and the school's standards for admission and acceptance. Students interested in school library media specialist certification should consult the school's Web site for requirements. Students seeking certification **must do so** as part of a master's degree program in information studies.

Timeline for Completion of Graduate Degrees – MS, MA and Specialist

The work for the master's or specialist's 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" (2.0 GPA) 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 may follow if the minimum 3.0 grade point average is not achieved by the end of the next semester of enrollment.

Juris Doctor (JD)/Master of Science (MS) Degree

The JD/MS joint degree program leads to both a Juris Doctor (JD) degree from the FSU College of Law and a Master of Science (MS) degree from the School of Library and Information Studies. Graduates of this program are particularly suited to work in law libraries and other organizations involved with the creation and dissemination of legal information. Students in the joint degree program receive academic advising from both the College of Law and the School of Library and Information Studies.

Nine semester hours of graduate coursework in Information Studies are credited toward the hours normally required for the Juris Doctor degree, and nine hours of Law courses are credited toward the thirty-six hours required for the Master of Science degree. This saves the joint-degree student eighteen 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 eighteen special semester hours described above, students are expected to fulfill all requirements for both degrees.

For more information about the JD/MS joint degree program, visit <http://slis.fsu.edu/Graduate-Program/JD-MS-Program>.

Doctor of Philosophy (PhD) Program

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 objectives of the doctoral program are to prepare graduates who:

- Have sufficient skills and knowledge to be successful critical scholars
- Are familiar with standard techniques of library and information science research
- Are aware of the multiplicity of problems in the information field to which these research techniques may be applied

Each student's program is planned individually, in concert with his/her major professor and Supervisory Committee (SC). Together they must formulate a comprehensive program of study that will ensure a mastery of major and minor areas of interest.

Applicants generally will hold a master's or equivalent degree. Due to the interdisciplinary nature of doctoral activity in information studies, applications from prospective students representing a wide range of fields are encouraged. A student must first meet the minimum requirements for admission to Florida State University Graduate School, as stated in the *Graduate Bulletin*.

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 information studies. Among the factors considered are the following:

1. Academic records of previous undergraduate, graduate, and professional studies
2. Performance on the general aptitude sections of the GRE
3. Quality and quantity of prior work experience
4. Three or more references provided by the applicants to attest to their experience and their ability to complete advanced study and research successfully;
5. A personal statement covering their career objectives, describing their research interests, as well as the specific qualifications of the applicant to pursue doctoral work
6. A recent research paper or writing sample
7. A current curriculum vitae or resumé
8. A digital video of the applicant detailing his/her background information and accomplishments, why he/she is interested in The FSU School of Library and Information Studies, research areas of interest, the faculty with whom he/she would like to work, and goals after completing the PhD

Admission Requirements – PhD Program

In order to be considered for admission to the PhD program, a student must:

1. Present proof of an earned minimum grade point average of 3.0 (on a 4.0 scale) on the last two years of a bachelor's degree from a regionally accredited institution, or a 3.0 on a completed master's degree from a regionally accredited institution. Due to the competitive nature of the program, a higher earned grade point average may be needed.
2. Present official test results from a nationally standardized graduate admission test, such as the General Test of the Graduate Record Examination (GRE), the Graduate Management Admission Test (GMAT), or the Miller Analogies Test (MAT). On August 1, 2011, Educational Testing Services (ETS) implemented a revised form of the GRE with a different scoring mechanism than the prior GRE. To accommodate these changes and ensure comparability between old and new versions of the GRE, the School of Library and Information Studies will consider and evaluate the percentiles associated with applicants' reported GRE scores in making admissions decisions. As a guide, the school looks for applicants to have a GRE percentile of at least 50 on each of the verbal and quantitative portions of the test. Based on ETS estimates, we prefer quantitative scores of at least 149 (scores achieved August 1, 2011 or later) or 630 (score achieved prior to August 1, 2011), and verbal scores of at least 150 (scores achieved August 1, 2011 or later) or 450 (score achieved prior to August 1, 2011) and a preferred writing score of 4.0 (for all GRE exams).

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 Library and Information Studies 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.

Statistics is important for success in the doctoral program; students admitted to the program must complete at least one graduate course or demonstrate equivalent competencies at the beginning of their coursework.

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, in the opinion of the committee, have the potential to succeed in the program.

All credentials for evaluation for entry must be received by Florida State University by February 1st. Applicants for financial aid should submit by early November. To be considered for all available financial assistance and to take advantage of the optimal sequence of courses, prospective students are counseled to enroll during the Fall semester only.

For more information about the PhD degree program, visit <http://slis.fsu.edu/Graduate-Program/PhD-Program>.

Certificate Programs

The School of Library and Information Studies offers graduate-level certificate programs that can be earned online (with the exception of Museum Studies).

Additional certificate programs may be added according to student needs. For more information about certificate programs, please visit <http://slis.fsu.edu/Graduate-Program/Certificate-Programs>.

Leadership and Management Certificate

This certificate program prepares librarians to be leaders and managers by enhancing their understanding of the unique challenges libraries face 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.

Museum Studies Certificate

This certificate program prepares graduates for museum careers by giving them the ability to analyze and achieve objectives in the professional museum field, including opportunities to receive valuable training in the field while working closely with museum staff on meaningful projects. The program enjoys a collaborative relationship with museums in London, Florence, cities throughout Belgium, the FSU Ringling Center for the Cultural Arts in Sarasota, and museums located on the Tallahassee campus including the Museum of Fine Arts, the Historic Textile and Clothing Collection, and The Institute on World War II and the Human Experience.

Reference Services Certificate

This certificate program prepares librarians to assume the role of an information, research, and instructional specialist in order to provide assistance to library 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 Library Media Leadership Certificate

This certificate program prepares school library media specialists to be leaders by strengthening skills in technology integration, instructional collaboration, reading, and information leadership. This Master's, post-Master's, or Specialist's certificate program is intended to develop increased expertise among people who already have some experience, rather than to introduce new professionals to the field.

It is specifically designed to develop leadership, analytical, and reflective skills that will facilitate success not only in professional practice but also towards National Board Certification in Library Media for already certified school library media specialists. The courses are constructed to provide the skills to positively impact student learning; collaborate with teachers to effectively use library resources tailored to the learning needs of students; facilitate reading strategies; and effectively select and integrate various technologies into the instructional program of the school. Note: Some experience as a certified school library media specialist is also preferred.

Information Architecture Certificate

This certificate program prepares information professionals to design, build, and manage a Web site as an information resource. 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.

Youth Services Certificate

This certificate program prepares librarians to be successful youth services librarians. This program offers training in resources, services, and evaluation focused on the information needs and interests of children and youth.

Harold Goldstein Library

The Harold Goldstein Library features a collection of approximately 65,000 books, videos, and CDs. The largest part of the collection consists of professional and reference materials, as well as juvenile and easy books. The

library subscribes to more than 400 serials and journals which are included in the aggregated online catalog comprising the six libraries on the FSU campus and available to all FSU users.

Institutes and Centers

Information Use Management & Policy Institute (<http://www.iu.fsu.edu>)

The 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 part of the College of Communication and Information, School of Library and Information Studies at Florida State University and 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, 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.

PALM Center (<http://www.cpt.fsu.edu/palmcenter.aspx>)

The Partnerships Advancing Library Media (PALM) Center is an internationally-recognized, interdisciplinary community of scholars, building on the synergy of transformational leadership practices, technology integration and critical literacies, for the benefit of 21st century learners. The Center conducts nationally and internationally-recognized interdisciplinary research at the intersection of transformational leadership, technology integration, and critical literacies – adding value and modeling practices that create positive differences in youth and adult learning outcomes.

The Center for Information Management and Scientific Communication

The Center will create repositories of information of particular interest to one or more research disciplines, make the information accessible to interested parties, and foster improvements in scientific communication. The Center will develop and apply analysis and organization methods to create decision support systems for the individual disciplines. The Center activities will advance the science of information analysis and organization, improve the research capabilities of research disciplines, and engage students in research and communication activities.

Definition of Prefix

IDC—Interdisciplinary Computing

LIS—Library and Information Studies

Note: With the approval of their academic adviser, master's degree students may take one 4000-level course which will count toward the degree.

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 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 5112. History of Reading in Everyday Life (3). The course introduces the history of reading in everyday life from ancient times through the nineteenth century in Europe, as well as the history of reading in everyday life in the United States from colonial to present times. Emphasis is on the examination of the influence of print on social, cultural, and intellectual life.

LIS 5113. History of American Librarianship (3). The course covers the development of American librarianship from colonial times to the present, with special reference to the relationship of library institutions to their contemporary social, economic, and political environments.

LIS 5203. Assessing Information Needs (3). Provides students with an overview of the user's perspective in the analysis of information needs and preferences. Provides the fundamentals to a broad approach, emphasizing a unifying structure, to understand human information seeking behaviors.

LIS 5241. International and Comparative Information Service (3). Explores the political economy of information, including those factors which encourage or discourage free exchange of information within and among inhabitants of countries worldwide. The unit of analysis is an individual country in comparison with others chosen from the spectrum of development. Attention is given to the legal, economic, and infrastructural conditions from a culturally sensitive point of view. Practical preparation for work abroad is provided.

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. Theory of information retrieval for text, images, and sound. Discussion of various retrieval, query, and knowledge representation methods beyond Boolean models, including vector, probabilistic, and associative network models. Elaboration of concepts of retrieval performance efficiency and effectiveness beyond precision and recall. Relevant issues of user interfaces and hypertext are explored.

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). Examines the principles and methods of systems analysis and research in the context of library and information studies. The course discusses typical problems studied and considers problem identification and definition as well as techniques of data collection and analysis, including statistical analysis.

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). Design, execution, and reporting of tests for the usability of information products and services. Covers cost justifying assessments and concepts of human cognition relevant to information processing.

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). Examines the theory, concepts and techniques for designing, producing, and evaluating networked multimedia resources to meet specific information needs. Students engage in collaborative design projects applying theoretical constructs from communication, education, engineering, graphic design, and information science to the provision of resources using multimedia network technologies.

LIS 5364. Web Site Development and Administration (3). Prerequisite: LIS 5362. Issues and techniques related to the planning, production, and management of large World Wide Web sites, including information organization and design, hardware and software, and cutting-edge development tools. Special emphasis paid to information provision, and the role of Web developers as providers and managers of information resources.

LIS 5367. Advanced Web Applications (3). Prerequisite: LIS 5362. Examines theory, concepts, and techniques for designing, producing, and evaluating World Wide Web applications to meet specific information needs. Students engage in design projects applying theoretical constructs to the provision of Web-based information resources using advanced authoring techniques.

LIS 5403. Human Resource Management for Information Professionals (3). This course provides education and information relevant to real-life and dynamic organizational events confronting human-resource (HR) managers working in 21st century information organizations and prepares students to provide optimal HR management through the use of team work and in-class assignments.

LIS 5405. Leadership in Technology (3). This course provides students with the knowledge, skills, and attitudes necessary to promote organizational leadership and the effective diffusion of technological innovations in school-library media centers and in school districts. The course incorporates National Board for Professional Teaching Standards in Library Media and focuses on technology-based instruction and on curricular improvement.

LIS 5408. Management of Information Organizations (3). This course enables students to develop a conceptual framework for integrating fundamental management concepts, principles, theories, and practices into an effective, personal management process that relates to information organizations of the 21st century.

LIS 5411. Introduction to Information Policy (3). Examines selected fundamental policy questions relating to information use, access, and dissemination. Particular attention is given to complex policy issues that involve value conflicts among information ownership rights, personal privacy rights, and public access rights to information in a societal context.

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). Provides an introduction to legal literature and to the tools of legal research to create an understanding of how legal information is organized, structured, and accessed in various settings.

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 5426. Planning, Evaluation and Financial Management (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). This course helps information professionals develop their leadership skills. Topics include how to think reflectively and strategically, lead ethically, influence others, work in teams, design functional organizations, and demonstrate leadership in action. Students focus on the personal values of leaders in the 21st century and analyze evidence-based leadership concepts.

LIS 5472. Digital Libraries (3). Prerequisite: LIS 5362. Corequisite: LIS 5703. The course offers a comprehensive overview of digital libraries, beginning with the conceptual underpinnings of digital libraries and broadening to include issues in the design, management, and evaluation of digital libraries, such as collection management and digitization, knowledge representation, access and user interfaces, archiving and digital preservation, as well as evaluation. The course also discusses the research literature addressing digital-library development.

LIS 5474. Business Information Needs and Sources (3). The course introduces students to print and electronic sources of business information, covers effective methods of access and evaluation of business information, and helps students acquire problem-solving skills and collection-development techniques suitable in business and related disciplines.

LIS 5484. Introduction to Data Networks for Information Professionals (3). An introductory course concerned with networking and telecommunications as a means of providing information services to users. From LANs to the information superhighway, it includes an introduction to voice, data, and video telecommunications concepts, technical requirements, and application issues, in addition to techniques and management of such systems.

LIS 5487. Information Systems Management (3). 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). Prerequisite: LIS 5484. Introduces students to the design, operation, and management of networked systems from local area networks (LANs) to the Internet. Includes communications concepts, technical, and application issues with a focus on managing a network.

LIS 5511. Management of Information Collections (3). This course covers the principles of collection development and intelligence gathering, including selection, acquisition, distribution, circulation, preservation, and de-selection of information resources in academic, public, and special library environments.

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 Specialist (3). The instructional role of the media specialist and methods of participating effectively in curricular planning, implementation, and evaluation.

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). Study of media for young adults in relation to their characteristics, needs, interests and abilities. Evaluation and use of print and audiovisual materials.

LIS 5566. Multicultural Literature and Information Resources for Children and Young Adults (3). 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 will locate, access, read, evaluate, and develop strategies to use multicultural literature and other resources to meet information needs of children and young adults.

LIS 5567. International Literature for Children and Young Adults (3). 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.

LIS 5576. Information Needs of Adults (3). Selection criteria, aids in selection and evaluation of materials relative to adult needs, publishing and production trends. Emphasis is on contemporary print and non-print materials for public library collections.

LIS 5590. Museum Informatics (3). Provides an introduction to the study of how technical innovations influence the social world of museums by exploring the nature of information technology in museums and the way modern information systems have shaped the museum environment.

LIS 5602. Marketing of Library and Information Services (3). The course covers concepts, techniques, and illustrations needed to develop first-rate nonprofit marketing skills for libraries and information services. These skills facilitate cost-effective and customer-centered strategic planning.

LIS 5603. Introduction to Information Services (3). Introduction to reference work using both print and online sources. It also addresses the relationship of reference work to other information services in libraries and other information-providing agencies.

LIS 5631. Health Information Sources (3). This course is a practical introduction to a variety of printed and electronic sources used to locate information in medicine, consumer health, nursing, and allied health. Course material is intended for those interested in medical and consumer health information resources in medical, public, or academic libraries where clients need health-related information.

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 theoretical 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. An examination of problems of entry, description, and subject analysis including the Library of Congress classification. Covers an analysis and evaluation of problems relating to the organization, operation, and management of a cataloging department.

LIS 5736. Indexing and Abstracting (3). Taking a practical approach to indexing and abstracting, this course covers manual and automatic processes and methods, and database organization and design. Emphasis is on indexing and abstracting in an online environment with attention to production rules, standards, markup languages, and file organization.

LIS 5737. Subject Analysis (3). Theory of subject access; analysis, evaluation, and comparison of major systems of subject organization including study of PRECIS and the development of an original classification scheme in a subject area of the student's interest.

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 5782. Database Management Systems (3). Examines the basic principles, elements and concepts of design, implementation and utilization of database management systems. Within database management systems, treats various models of data and databases. Also considers the administrative tasks associated in the database management environment.

LIS 5786. Introduction to Information Architecture (3). Recommended prerequisites: LIS 5362 and LIS 5703. This course provides instruction and learning experiences in the user-centered design of information spaces, especially Web sites. The entire information-architecture process is covered, as follows: determining the user's needs, organizing the information to be presented, and specifying the final design parameters. The culmination of the course is for students to offer a technical solution to a specific information-system need that takes into account social and organizational contexts.

LIS 5787. Fundamentals of Metadata Theory and Practice (3). Prerequisite: LIS 5703. This course introduces 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, and museums. Real-life scenarios and collections are used to highlight and gain understanding of the issues related to metadata creation, aggregation, and re-use.

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 (1-3). Consideration of selected topics and issues in information studies not included elsewhere in the curriculum. Credit is, and enrollment may be, determined by the instructor. Different sections may be taken in the same semester. May be repeated to a maximum of twelve semester hours as content varies.

LIS 5945r. Internship (0–12). (S/U grade only.) An opportunity to learn how library and information studies principles and techniques are applied in a professional setting. A minimum of forty-five (45) 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 the Historical Foundations of Library and Information Science (3). This course is a historical and critical examination of the intellectual traditions and foundational literature of library and information science (LIS). 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 6205. Issues in Information Behavior (3). Prepares doctoral students to do research focusing on an aspect of information behavior through 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.

LIS 6269. Seminar in Information Science (3). Surveys recent developments and emerging technologies in library and information science. Stresses research methodologies in these areas.

LIS 6278. Issues in Theory Development (3–5). Students will develop an understanding of the scientific approach to the development of knowledge; analyze historical and social factors associated with theory construction; gain exposure to research and writings in the area of theory development; utilize conceptual tools to develop theories; increase understanding of ways to critique theories; analyze the progression of ideas through the accomplishments of a prominent theorist; and engage in the exploration of epistemological issues through the creation of a theory of the student's choice.

LIS 6279r. Research in Information Studies (3). Examines various topics, including data collection, analysis, and interpretation, as well as preparation of designs for conducting individual research in information studies. May be repeated to a maximum of six semester hours.

LIS 6289. Seminar in Education for Information Studies (3). Within the framework of University and professional education, 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). A thematic examination of issues in intellectual access. Possible topics include (but are not limited to) the relationship between the structure of knowledge and access to electronic information; knowledge structures for digital libraries; the social construction of information; and the impact of economic classification structures on access to information.

LIS 6909r. Directed Individual Study (1–8). (S/U grade only.) May be repeated within the same term to a maximum of eight 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 (1–5). Directed and supervised detailed investigation of selected problems, issues, and trends in the various areas of librarianship/information studies including, but not limited to, cataloging and classification; work with the disadvantaged; children and youth services; academic, public, school, and special libraries; administration; information science. Offerings will vary because of currency and the changing nature of the subject matter. May be repeated to a maximum of six semester hours.

LIS 6936r. Proseminar in LIS Research and Teaching (1–3). This course introduces students to research and teaching, 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. May be repeated to a maximum of twelve hours.

LIS 6980r. Dissertation (1–12). (S/U grade only.) Dissertation credits to be arranged in consultation with major professor. Maximum of twelve semester hours may be taken in any given semester. All doctoral students must complete twenty-four semester hours of dissertation as part of the program of study.

LIS 8964r. Doctoral Preliminary Examination (0). (P/F grade only.)

LIS 8966r. Master's Comprehensive 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.)

Interdepartmental Minor in LINGUISTICS

Curriculum Committee: C. Gonzalez, M. Leeser, L. Reglero, G. Sunderman (Modern Languages and Linguistics)

Web Page: <http://www.academic-guide.fsu.edu/minors.html#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.

Undergraduate and graduate students who wish to minor in linguistics should choose a minor adviser 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; three 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*.

Undergraduate

Undergraduate students in linguistics must take at least twelve semester hours from the linguistics courses listed below; two of these must be core courses.

Core Courses

LIN 3041, LIN 4030, LIN 4040, 4512, LIN 4905

Other Courses

ANT 4640, LIN 3710, LIN 4930, LIN 5772, EXP 4640, PHI 3220

Note: Additional courses may count with approval of the departmental curriculum committee.

Graduate

Graduate students in linguistics must take at least fifteen semester hours from the linguistics courses listed below; two of these must be core courses.

Core Courses

LIN 5035, LIN 5045, LIN 5510

Other Courses

LIN 5772, LIN 5908r, LIN 5932, SPN 5805

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

INSTITUTIONAL RESEARCH:

see Educational Leadership and Policy Studies

INSTRUCTIONAL SYSTEMS:

see Educational Psychology and Learning Systems

Department of MANAGEMENT

COLLEGE OF BUSINESS

Web Page: <http://cob.fsu.edu/man/>

Chair: Ceasar Douglas; **Professors:** Anthony, Ferris, Fiorito, Hochwarter, Lamont, Martinko, Osteryoung, Paradice, Perrewé, Stepina; **Associate Professors:** Armstrong, Bush, Douglas, Matherly, Van Iddekinge; **Assistant Professors:** Charles, Holcomb, Holmes, Tang; **Associates in Management and MIS:** Blass, Diez-Arguelles, O'Connor, Payne, Ryals, Simmons, Trammell; **Assistants in Management:** Dever; **Frances Eppes Professor of Management:** Ferris; **Haywood & Betty Taylor Eminent Scholar in Business Administration:** Perrewé; **Thomas L. Williams Jr. Eminent Scholar:** Lamont; **Sprint/United Telephone of Florida Professor:** Paradice; **J. Frank Dame Professor of Management:** Fiorito; **Carl DeSantis Professor of Business Administration:** Lamont; **Bank of America Professor of Business Administration:** Martinko; **Jim Moran Professors of Business Administration:** Hochwarter, Douglas

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 strategic management and entrepreneurship, organizational behavior and theory, management information systems, international and comparative management, attribution theory, personnel management, leadership, labor relations, research methods, job stress, job design, employee turnover, training and development, and strategic human resource management.

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.

Doctoral Degree

The college offers a Doctor of Philosophy (PhD) in business administration. The management department offers three concentrations in the PhD program: management information systems, organizational behavior and human resources, and strategic management. The PhD program prepares students for teaching and research at the university level.

Graduates have been placed at universities throughout the United States, including Auburn University, Florida International University, Florida Atlantic University, University of Tennessee, University of South Florida, Penn State University, University of Georgia, California State University at Fullerton, New Mexico State University, Texas Christian University, Appalachian State University, Old Dominion University, University of North Carolina at Charlotte, Georgia Southern University, and Michigan State University.

Master's Degree in Management Information Systems

The Master's Degree Program of Management Information Systems (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 (MS) 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 and Spring semesters. Deadlines for receipt of all application materials are June 1 for Fall and October 1 for Spring.

Definition of Prefixes

GEB—General Business

ISM—Information Systems Management

MAN—Management

Graduate Courses

Master's

Note: The 5000 level courses are 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 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 5021. Information and Technology Management (3). 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. Course focus will cover society as a whole, electronic communities, organizational impacts, the implications of design choices, and ethical considerations.

ISM 5123. Information Systems Analysis and Design (3). 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, they will 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 5159. Global Information Systems (3). This course explores some of the issues related to information systems and their place in a global society. Topics include how global information systems are developed and managed, the role of national culture in the adoption and use of information systems, as well as global IS strategy and workforce issues.

ISM 5206. Database Development and Management (3). 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 will be discussed. Organizational concerns in database use will be 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 will provide good exposure to the basic telecommunications technology concepts, standards, products and services, and the emerging developments in telecommunications, and will provide 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 5906r. 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.

ISM 5907r. Special Studies in Management: Information and Systems Management (1–3). Prerequisite: Consent of associate dean for academic programs. Each course is repeatable up to three times.

ISM 5935r. Special Topics in Information and Management Sciences (1–3). In-depth study of current topics in information and management sciences. May be repeated to a maximum of three times as topics vary.

MAN 5245. Organizational Behavior (1–4). 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 5721. Strategy and Business Policy (1–4). Prerequisite: All other Master of Business Administration core courses. The 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 5940r. 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 5971r. Thesis (3-6). A minimum of six semester hours is required.

MAN 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

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). A discussion of the different theories and views about organizations and the design of information and communication systems in organizations. Students will 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). 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). 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). 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). 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.)

MAN 6235r. Doctoral Seminar in Organizational Theory (1-3). 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). An examination of selected topics in strategic management. Frequently, one term examines strategy formulation and the next examines strategy implementation.

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 6932. Doctoral Seminar in Strategic Management I: Literature (3). 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). An examination of special topics in organizational behavior. Topic changes from term to term.

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*; Management Information Systems;
Sport Management, Recreation Management, and Physical
Education

MARINE BIOLOGY
see Biological Science

Department of MARKETING

COLLEGE OF BUSINESS

Web Page: <http://cob.fsu.edu/mar/>

Chair: Michael Brady; **Professors:** Brady, Brusco, Cronin, Downs, Giunipero, Goldsmith, Hartline, Hofacker, Knight; **Associate Professors:** Lee, Kim; **Assistant Professors:** Andrews, Bolander, Bonney, Pelozo, Smith; **Research Associate:** Larsen; **Associate in Marketing:** Pallentino; **John R. Kerr Research Chair in Marketing:** Cronin; **Richard M. Baker Professor of Marketing:** Goldsmith; **Synovus Professor of Marketing:** Brusco; **Carl DeSantis Professor of Business Administration:** Brady; **Charles A. Bruning Professor of Business Administration:** Hartline

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 and consumer behavior, the department also houses faculty in sales, operations management, operations research, supply chain management, and multinational business operations. In most colleges of business, these faculty groups reside in separate departments. 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 or service operations management. 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 a growing scholarly interest in the interdisciplinary nature of services.

Master's Degree

The department offers the Master of Science in Marketing (MSM) degree with two paths of completion: 1) a standalone MSM program and 2) a combined Bachelor's/Master's program for top undergraduate students. Post-baccalaureate students entering the program will apply for admission through the university and the Graduate Programs office within the College of Business. The combined BS/MS in Marketing program is designed for academically strong undergraduate students who wish to pursue an accelerated program culminating in a Bachelor of Science in Marketing and a Master of Science in Marketing. This program allows up to twelve credits of coursework to be dually counted toward both the BS and the MS degrees. An undergraduate student wishing to enroll in the combined program must apply through the Graduate Programs Office in the College of Business.

The overall theme of the MSM program is Corporate Reputation Management. Recent trends in the marketing and business environments have caused organizations to look more closely at their marketing and branding efforts. It is no longer possible to consider customers to be the sole target for marketing activities. Today, firms must take a 360-degree view of their brand and engage in marketing activities that manage the firm's reputation among a variety of key stakeholders (i.e., customers, employees, government, media, society). The MSM Program allows top undergraduates and MS students to gain needed training in this area.

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 adviser 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-busi-

ness 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.

Definition of Prefixes

GEB—General Business

MAN—Management

MAR—Marketing

QMB—Quantitative Methods in Business

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. Courses which may be repeated for credit are designated by "r" immediately following the course number.

MAN 5501. Operations Management (3). 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.

MAN 5601. Multinational Business Operations (3). Graduate survey of international business. Concepts of international economics blended with the marketing of goods and services in international markets. Current international events discussed.

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 5465. Purchasing and Supply Chain Management (3). This course analyzes functions involved and variables needed to control flow of materials; emphasis is on economic environment for materials acquisition and allocation.

MAR 5466. Supply Chain II: Seminar in Customer Relationship (4). 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 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 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.

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 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 5917r. Supervised Research (1-3). (S/U grade only.) Prerequisite: Permission from the 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.

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 5940r. Supervised Teaching (1-3). (S/U grade only.) Prerequisite: Permission from the associate dean for academic programs. A maximum of three semester hours may apply toward the master's degree. May be repeated to a maximum of five semester hours.

MAR 5971r. Thesis (3-6). (S/U grade only.) A minimum of six semester hours credit is required.

MAR 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

MAR 8976r. Master's Thesis Defense (0). (P/F grade only.)

QMB 5755. Studies in Operations Research (3). Introductory treatment of operations research methodology, with emphasis on applications of network, inventory, scheduling, and queuing decision models to business and management.

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 (9) semester hours.

QMB 5935r. Special Topics in Quantitative Methods (1-3). 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 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.

MAN 6930. Doctoral Seminar in Productive Systems Management: Planning and Control (3). Prerequisite: QMB 5755. Study of the research literature dealing with the planning and control of productive systems with special emphasis on the research methodologies and designs employed in the field.

MAN 6931. Doctoral Seminar in Productive Systems Management: Strategy and Design (3). Study of the research literature dealing with the strategic design and problem solving to productive systems with emphasis on identification of required research and development of designs to accomplish the research.

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 Theory (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 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.

MAR 6658. Quantitative Methods II: Psychometric and Econometric Approaches to Marketing (3). Prerequisites: MAR 6979, STA 5206, STA 5207, STA 5707, or instructor permission. Study of confirmatory factor analysis, structural equation models, time-series models, and related topics and their application to marketing theory and practice.

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 research 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.)

Program in MARRIAGE AND FAMILY THERAPY

COLLEGE OF HUMAN SCIENCES

Web Page: http://www.chs.fsu.edu/fcs_doc_mft

Program Director: Wayne Denton; **Clinical Professors:** Barlow, Denton, Holtrop, McWey; **Nonclinical Professors:** Cui, Darling, Fincham, Mullis, Pasley, Ralston, Readdick, Rehm

The Doctoral Program in Marriage and Family Therapy at Florida State University is in the Department of Family and Child Sciences, College of Human Sciences. The mission of the program is to generate new knowledge and produce marriage and family therapy scholars and leaders while addressing family processes and empirically supported relational interventions for today's diverse families. The program is one of the most distinguished in the nation and attracts students from across the country and around the world. It is one of the oldest doctoral programs accredited by the Commission for Accreditation for Marriage and Family Therapy Education (COAMFTE) of the American Association for Marriage and Family Therapy (AAMFT).

The doctoral MFT program shares the vision of the Department of Family and Child Sciences of which it is an integrated part. We believe that students best learn through active and integrated engagement in research, teaching, and clinical practice. We promote three foci in our activities: relational development and enhancement in young adults, couples, and families; distressed families and relational interventions; and the link between parenting processes and relational outcomes. The program requires a substantial foundation in family science and a commitment to human diversity. A credible program of applied family science must incorporate empirically validated interventions that appreciate contextual issues and value of multiple realities.

MFT graduates are expected to become the next generation of scholars and compete successfully for faculty positions in family science, MFT, and related fields, occupy high-level administrative and policy making/consultation positions, and/or provide and train others to provide MFT in a wide range of settings. Therefore, the focus of the MFT program is to provide depth of knowledge and research expertise in evidence-based practices while working with diverse individuals, couples, families, and settings.

Requirements

To apply to the doctoral program in Marriage and Family Therapy, contact the program assistant, 225 Sandels Building, College of Human Sciences, Florida State University, Tallahassee, FL 32306-1491; (850) 644-3217.

In general, applicants should hold a master's degree in marriage and family therapy, psychology, social work or a related field, and have at least a year of clinical experience. They should have better than average Graduate Record Examination (GRE) scores and a 3.5 GPA on a 4.0 scale for the last two years of academic work. They must complete all necessary University and departmental admission forms, including a personal statement of the fit between their scholarly aspirations and this program, and provide a minimum of three letters of recommendation from references who can assess their scholarly and clinical potential. Fully completed applications must arrive by January 5th to be considered for the Fall term. Those interested in competitive University fellowships should apply by November 1st. The most qualified candidates will be invited to attend an on-campus interview with the faculty in February. Attendance at this interview is required for admission. Departmental assistantships are available to successful applicants, as are other forms of financial assistance. Students are admitted **only** in the Fall semester.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Coursework

Program requirements for students who have a master's degree in Marriage and Family Therapy (MFT) from COAMFTE-accredited programs include a minimum of forty-one semester hours of coursework, twelve semester hours of clinical practicum, twelve semester hours of formal internship credits, and twenty-four semester hours of dissertation credits. The course requirements include semester hours in family science, research methodology and statistics, best practices family interventions, and clinical practicum and supervision. Students who satisfactorily complete their coursework undergo comprehensive examination and, if successful, are admitted to doctoral candidacy. They then must complete a formal internship and the dissertation process.

The sequence of courses generally takes three or more years, including Summer semesters. Full time attendance is required. Students who do not have a master's degree in Marriage and Family Therapy must complete additional coursework and clinical experience to meet the standard curriculum requirements of COAMFTE. All students will complete a supervised nine or twelve

month internship and at the time of graduation must document at least 1000 direct client contact hours, half of which have more than one family member in the treatment session.

Clinical Training

Students are required to be in clinical training beginning from the first semester until their graduation. Student therapists at the Center for Couple and Family Therapy work with a variety of clients from a broad spectrum of socio-economic and ethnic backgrounds. Presenting problems vary and include difficulties in couples and family relationships, parenting issues, divorce and post-divorce issues, sexual and physical abuse, domestic violence, alcohol and substance abuse, self-esteem issues, depression, anxiety, remarriage and stepfamilies, school stress, marital and premarital issues, and court-ordered therapy and parenting.

Before graduating from the doctoral program, all students will have completed 1000 hours of direct client contact. Graduates from COAMFTE-accredited master's programs need to acquire 500 additional hours meeting COAMFTE accreditation standards. At least 200 of these hours are at the Center for Couple and Family Therapy and must be completed to be eligible for Comprehensive Examination(s). In addition to these clinical hours, students who do not have a master's degree in Marriage and Family Therapy from a COAMFTE-accredited program are responsible for completing all of the COAMFTE Standard Curriculum courses and clinical requirements in addition to the doctoral program requirements. These include 500 direct client contact hours, half of which are relational, under the supervision of an AAMFT Approved Supervisor or a designated equivalent. No part of the Standard Curriculum may be waived. Courses and clinical hours thought to be equivalent to that required in the Standard Curriculum require approval of the supervisory faculty. All clinical hours must be accomplished at the Center for Marriage and Family Therapy, under the supervision of the program's clinical faculty. Upon entering the program, each non-COAMFTE master's graduate will negotiate a training contract with the MFT Program Director which specifies how the students and the program will meet the requirements of the Standard Curriculum.

Supervision

The clinical faculty conduct supervision in accordance with COAMFTE guidelines. Supervision includes individual and group supervision using live, digitally-recorded, and case presentation formats. At least one hour of supervision is provided for every five hours of client contact on a weekly basis for all registered practicum students. All students enroll in practicum until they start their internship and dissertations.

Research

The faculty believe strongly that the value added from a doctorate in MFT is advanced scholarship. Therefore, the students and faculty collaborate in a wide range of clinical, theoretical, and basic research projects, presentations, and publications, using quantitative and qualitative methodologies.

This information covers only a small part of the doctoral program in MFT policies and procedures. For additional information, please contact the Program Office at (850) 644-3217.

**MASS MEDIA COMMUNICATIONS:
see Communication**

MATERIALS SCIENCE AND ENGINEERING

THE GRADUATE SCHOOL

Web Page: <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. The core courses are designed to give students from the various disciplines a common background in materials. The courses for the degree 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 January fifteenth to be considered for financial aid for the following Fall semester. Applicants must meet the following minimum requirements:

1. 3.0 undergraduate GPA (4.0 scale) as an upper-level undergraduate
2. GRE scores - at least 75th percentile for the Quantitative section and the 55th percentile for the Verbal section

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

3. Three recent letters of recommendation from individuals who are able to assess the applicant's academic and research potential
4. One set of official transcripts that is sent to the FSU Office of Admissions and one set of 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 Center for Intensive English Studies (<http://cies.fsu.edu/>) at Florida State University.

Degree Requirements - MS

Overall requirements for the degree of Master of Science in Materials Science and Engineering are:

1. Admission to Materials Science and Engineering
2. A minimum of thirty credits as follows:
 - a. Twelve credits of core courses - three required courses, one elective course
 - b. Twelve credits of specialization courses (see specialization areas below)
 - c. Six credits of thesis research
 - d. Interdisciplinary seminar series all semesters
3. Successfully present a research prospectus
4. Complete research in materials science and engineering
5. Submit and successfully defend an acceptable thesis

A list of the core and specialization courses can be found at <http://materials.fsu.edu>.

Specialization areas for the MS degree are: nanoscale materials, composite materials and interfaces; polymers and bio-inspired materials; functional materials; as well as computational materials science and mechanics.

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:

1. Admission to Materials Science and Engineering
2. A minimum of fifty-four credits as follows:

- a. Twelve credits of core courses - three required courses, one elective course
 - b. Fifteen credits of specialization courses (five specialization courses)
 - c. Twenty-four credits of dissertation research
 - d. Interdisciplinary seminar series all semesters
3. Successfully pass a qualifying examination
 4. Successfully present a research 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>.

Department of MATHEMATICS

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.math.fsu.edu/>

Chair: Philip L. Bowers; **Associate Chair:** Bellenot; **Associate Chair for Graduate Studies:** Case; **Director of Pure Mathematics:** van Hoeij; **Director of Applied and Computational Mathematics:** Wang; **Co-Directors of Financial Mathematics:** Kercheval, Okten; **Co-Directors of Biomathematics:** Bertram, Quine; **Professors:** Aluffi, Bellenot, Bertram, Bowers, Case, S. Fenley, Gallivan, Heil, Hironaka, Huckaba, Hussaini, Kercheval, Klassen, Kopriva, Mesterton-Gibbons, Mio, Nichols, Oberlin, Quine, Seppala, Sussman, Tam, van Hoeij, Wang; **Associate Professors:** Agashe, Aldrovandi, Cogan, Hurdal, Magnan, Muslimani, Nolder, Okten; **Assistant Professors:** Ewald, Kim, Petersen; **Coordinator of Basic Mathematics:** Blackwelder; **Coordinator of Graduate Teaching Assistants:** Kirby; **Coordinators of Actuarial Science:** Case, Paris; **Professors Emeriti:** Blumsack, Bryant, Gilmer, Heerema, Howard, Kreimer, Mott, Summers, Wright; **Courtesy Professors:** Absil, Beaumont, Chen, Croicu, le Dimet, Erlebacher, M. Fenley, Gan, Gunzburger, Marcolli, Mascagni, Mathelin, Moorer, Navon, Peterson, Tabak, Tang, van Dooren, Xq Wang

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. This includes 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 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, three Distinguished Research Professors, three faculty holding named professorships, 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, International Association of Financial Engineers, 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, file and computer servers. Across the university, students and faculty have access to a variety of the 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), to an increasing number of eJournals (such as SIAM Journals and Springer LINK), as well as to 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 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 four major options for the master's degree. Course choices within the guidelines of a major are made in conference with the director of a program or an adviser appointed by the chair of the department. For all options, the student should consult the updated degree guidelines, requirements, and additional information available on the Web site.

Hours from the courses MAT 5911r, 5921r, 5941r, and 5946r are not applicable toward hours required for degree programs; MAT 5907r, MAT 5933r, MAT 6908r, MAT 6933r, seminars, and internships are applicable only with documented area and departmental permission. No 4000-level course in this department may count toward the master's degree. A student who has successfully completed MAT 8964 and is admitted to doctoral candidacy will be deemed to have qualified for a master's degree, subject to University and College requirements.

Options A and B may be either course type (thirty-two or more semester hours of graduate courses with a comprehensive examination and excluding MAT 5971r) or thesis type (thirty or more semester hours including six semester hours in MAT 5971r and appropriate thesis defense). These options will include at least twenty-two semester hours in courses offered by the department. A student may pursue a "Directed Program of Study" with a particular object or concentration motivating substitutes for some requirements but including most of those of A or B below. For example, a student interested in preparing for mathematics specialist or community college teaching may arrange a relevant program. Early planning of a special program is necessary, and the student should work closely with a faculty member beginning from the first semester of residence.

Options C and D are "Professional Science Master's" degrees (Council of Graduate Schools designation); these require thirty-six semester hours of courses and include a final semester projects class and internship opportunities. Students develop a mix of mathematical, statistical, and computational skills underpinning specialized knowledge in science, finance, or economics. After completing a professional master's degree and passing area-approved qualifying examinations, students may choose to pursue doctoral dissertation research with faculty who are actively involved in collaborations with researchers in other sciences, medicine, economics, or the financial sector.

A. **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, modeling, and statistics. The master's degree in pure

mathematics provides excellent preparation for many careers in education, industry, and government. A secondary concentration in actuarial science may be elected. 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 professional degree prepares students for work in financial institutions and markets and also for doctoral research in mathematical finance. The Financial Mathematics Festival brings practitioners from the financial sector to talk about the problems they solve and the opportunities available. In cooperation with faculty from computer science, economics, finance, risk management, and statistics, a student's program is designed to include individually appropriate choices meeting the guidelines. A secondary concentration in actuarial science may be elected. Students are also encouraged to pursue internship opportunities.
- D. **Biomathematics.** Studies in this interdisciplinary program include specialized mathematics courses, laboratory experiences, and supporting courses from the departments of statistics, biological science, chemistry, computer science, and the Program in Neuroscience, and the Institute of Molecular Biophysics. Coursework, workshops, and corollary activities prepare students to work in bioinformatics or mathematical applications to genomic, biomedical, biophysical research, or imaging research.

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 both pure and applied and computational mathematics as well as in two interdisciplinary areas, biomathematics and financial mathematics. 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 that offers depth 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 must 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. If the minor is in mathematics, these hours must be outside the list of courses accepted for the doctoral qualifying examinations in the student's area (and not part of the master's for that area). 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, 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 ap-

propriate research seminar for a minimum of three semesters. It is a university requirement that the defense of dissertation must be held within five years; 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 5721. Computer Analysis (3).** Prerequisites: MAA 4227 or 5307; MAA 4402 or 5406. Automatic differentiation, automatic integration, indefinite summation; applications to partial differential equations; advanced topics in complex analysis.
- 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 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 5757. High Order Finite Difference Methods for Computational Acoustics and Fluid Dynamics (3). Prerequisite: MAD 5738. High order spatial and temporal discretization; artificial selective damping; numerical stability; radiation, inflow and outflow boundary conditions; wall and time-domain impedance boundary conditions; nonlinear acoustic waves; design of computation algorithms for direct numerical simulation.

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. Credit not allowed unless MAP 5177 and MAP 5178 are successfully completed as a sequence.

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 5485. Introduction to Mathematical Biophysics (3). Prerequisites: MAC 2313; MAS 3105. Mathematical tools: symbolic and numerical mathematical software packages, matrix computations, rotation matrices, Euclidean motions, lattices, continuous and discrete curves in space, torsion angles, gram and distance matrices, graphs, string matching algorithms, Fourier series, conformal mapping. Applications such as: protein secondary structure; structure determination by crystallography and NMR; writhing, twisting and knotting of DNA; nucleotide and amino acid sequence alignment; brain mapping.

MAP 5486. Computational Methods in Biology (3). Prerequisite: MAP 5485. 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: MAP5601; 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: 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 6434r. Advanced Topics in Hydrodynamics (3). May be repeated to a maximum of eighteen 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 5331r. Algebraic Structures I (3). Prerequisite: MAS 5312. An intensive study of the structure of one or more of the following algebraic systems: groups, rings, fields. Each course may be repeated to a maximum of six semester hours.

MAS 5332r. Algebraic Structures, II (3). Prerequisite: MAS 5331. Continuation of MAS 5331.

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 6396r. Advanced Topics in Algebra I (3). May be repeated to a maximum of six 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 5920r. Colloquium (0). (S/U grade only.) A series of lectures given by faculty and visitors addressing various topics of mathematical interest.

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 8976. Master's Thesis Defense (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. Gödel's completeness theorem and related theorems. Applications to modern algebra. Non-standard analysis.

MTG 5326. Topology I (3). Prerequisite: Graduate standing. Fundamental group and covering spaces, simplicial and CW complexes, elementary homotopy theory, elementary homology theory.

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, Poincaré 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, Poincaré 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, Poincaré, 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 Middle and Secondary Education

MEASUREMENT AND STATISTICS:
see Educational Psychology and Learning Systems

Department of MECHANICAL ENGINEERING

FAMU—FSU COLLEGE OF ENGINEERING

Web Page: <http://www.eng.fsu.edu/me/>

Chair: Chiang Shih; **Associate Chair:** Emmanuel Collins; **Professors:** Alvi, Chen, Collins, Hellstrom, Kalu, Krothapalli, Larbalestier, Lourenco, Shih, Van Dommelen, Van Sciver; **Associate Professors:** Cartes, Hollis, Hruda, Moore, Ordóñez; **Assistant Professors:** Clark, Englander, Oates; **Affiliated Faculty:** El-Azab, Garmestani, Han, Hussaini, Luongo, Schwartz, Tam; **Adjunct Faculty:** Ahmed, Boeshagh, Chuy, Yeol; **Professors Emeriti:** Buzyna, Gielisse

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 cultivate and maintain 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 material 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 Material 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.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, and optical diagnostic development lab, a supersonic and a large subsonic wind tunnel. In addition to AAPL, the center is home to several state-of-the-art research laboratories lead 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 represents a cooperative approach for conducting interdisciplinary research in the automated systems area across two departments (Mechanical Engineering and Electrical and Computer Engineering) in the College of Engineering and the Department of Computer Science. 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 **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 equipped with quasi-static and dynamic characterization measurement systems and computational facilities for studying the field-coupled material behavior and dynamics of a number of adaptive materials and devices. Material characterization equipment includes a benchtop MTS load frame for soft materials, high voltage (10 kV) power supply, high impedance electrometer, and polarized optical microscope for *in situ*/ material characterization. An additional facility at the Advanced Aero Propulsion Laboratory is equipped with a 1000V/7A switching power supply for driving piezoelectric materials, dSpace and Simulink for dynamics and controls experiments and coupling smart structures with flow environments. A new 3D visualization system is also available for imaging 3D simulations and data as part of a program in collaboration with the Department of Scientific Computing at Florida State University.

The **Program in Computational Fluid Dynamics** involves algorithm development and application in the areas of: 1) unsteady flows with large-scale separation; 2) computational and mathematical acoustics; 3) unsteady biofluid mechanics; 4) modeling of turbulent flows; and 5) parallel solution of partial differential equations. These are areas of considerable interest, as well as physical importance, which pose particular numerical simulation challenges. The computational program is supported by the Department of Scientific Computing at Florida State University, which operates an 168 node IBM SP-3 with 84 gigabytes of memory, as well as a heterogeneous compute cluster and several mid-range computers.

The **Cryogenics Laboratory** is a fully equipped facility for the conducting of low-temperature experimental research and development. The laboratory, which occupies approximately 400 m² at the National High Magnetic Field Laboratory (adjacent to the College of Engineering), supports research and development projects in a wide variety of technical fields. Numerous experimental apparatus are available within the Cryogenics Laboratory for research projects. The **Liquid Helium Flow Facility (LHFF)** consists of a 5 m long, 20 cm ID horizontal cryogenic vessel with vertical reservoirs at each end containing circulation pumps and other hardware. The facility includes transverse viewing ports for flow visualization studies. The **Cryogenic Helium Experimental Facility (CHEF)** consisting 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. The **Cryogenic Particle Image Velocimetry (PIV) Facility** including apparatus to perform micro-scale imaging studies of flow fields in cryogenic fluids. A cryogenic vessel with optical windows, dual head pulse Nd:YAG laser and image processing equipment are included in the facility. Currently, this facility is being used to develop neutral density particles, including solid H₂/D₂, and observe flow fields in liquid helium. A *cryogenic transport property measuring facility* that includes a two stage GM Cryocooler with compressor that can achieve T_{min} = 10 K and provide 30 W at 20 K and 60 W at about 70 K. All cryogenics facilities are supported by a full complement of cryogenic hardware to measure flow rate, void fraction, liquid level, temperature and pressure. Microcomputer data acquisition is available for interfacing to all experiments. The electronics available in the laboratory that may be accessed through this system include a full complement of amplifiers, signal conditioning equipment and data recorders. The laboratory contains all necessary equipment to perform modern cryogenic

experiments. High vacuum equipment including a mass spectrometer leak detector and two portable turbo pump systems provides thermal isolation. A high-capacity vacuum pump (500 liter/s) is used to support subatmospheric experiments including those with superfluid helium.

The **Robotics Laboratory** conducts research in four broad areas: robust control, mechatronics and robotics, applications of adaptive and intelligent control, and computer aided design. In *robust control* research, emphasis is on the development of optimization-based, control synthesis techniques for the design of fixed-architecture, robust controllers for mechanical systems (e.g., jet engines and magnetic bearings) with uncertain dynamics. *Mechatronics* is an interdisciplinary design methodology based upon a synergistic integration of fundamental procedures and techniques from mechanical, electrical, and computer engineering. Research in this area involves the use of specialized microelectronic sensors, actuators, and processors. In the area of *robotics* the objective is to employ multiple sensors and actuators to monitor and control wheeled mobile robots. *Adaptive and intelligent control* focuses on distributed knowledge based control techniques for linear and nonlinear systems, which allow processes to adapt to changes in parameters and learn to respond properly under rapidly changing constraints. Research in this area requires highly integrated mechanical engineering, electrical and computer engineering, and computer science solutions and is conducted in the *Power Control Lab* of the *Center for Advanced Power Systems*. The research conducted in the *Computer Aided Design* facility (CAD) involves computer modeling of complex systems, such as solid assemblies, followed by the simulation of these same systems. The CAD facility is currently well equipped with IBM RS/6000 workstations, Silicon Graphics Indy workstations, multimedia Pentium personal computers, and several laser and color inkjet printers.

The **Robotics Laboratory** also conducts intelligent mechanical systems research including: manipulator design and control, haptic interface design and control, machine learning, mobile robot control, human-robot collaboration (COBOT), and telerobot control. Recent projects include: manipulator design for human-robot collaborative systems, novel suspension design for decreased mobile robot wheel slip, control algorithm development for parallel robots, mobile robot terrain classification using neural networks, mitigation of time delay effects in telerobot control, and lift hoists design for automatic inertia calculation of space systems. The laboratory offers research opportunities for students seeking master's and doctoral degrees as well as for undergraduate students. The majority of students work on individual projects that involve: design of electro-mechanical systems to solve engineering problems; use of experimentation, mockups, and computer simulations to develop and study control algorithms and novel mechanism; production of CAD drawings, part manufacturing and assembly; and electronic control chassis design and construction.

The **High Temperature Superconductors Magnets and Materials Laboratory (HTSMML)** involves experimental and computational research that advances the fundamental understanding and applications of high-temperature superconducting materials. HTSMML research is interdisciplinary, involving materials processing, composite mechanical behavior, and electrical-magnetic-mechanical properties of these emerging technical superconductors. This research includes the investigation of the key obstacles to implementing HTS materials in practical magnet systems. Current research directions include the development of a 5 T insert coil, coil design optimization, electro-mechanical behavior of conductors for power applications, magneto-optical imaging of YBCO coated conductors subjected to axial tension, quench propagation measurements, ac loss measurements, processing of low ac loss conductors, processing of alternative conductor materials, and texturing of materials within high magnetic field. Computational research is motivated by the experimental research. Research in the HTSMML is lead by Professor Justin Schwartz and includes research staff from the NHMFL and the Center for Advanced Power Systems, post-doctoral researchers, graduate students, and undergraduate students.

Research programs in the **Materials Processing and Applications Laboratory** focus on the development of processes that put high performance materials into actual system or device applications. As such, the programs tend to be interdisciplinary and cooperative research efforts often are carried out with industrial firms. The laboratory's aim is to provide novel ideas and approaches to solutions of engineering problems in cutting edge technologies and to educate students in complex real-life settings. Accomplishments include the development of a magnetometer system for nondestructive analysis of materials and the development of a software design tool for multilayer structures. Physical property measurements of materials are being conducted in a variety of areas, including the measurement of the thermal expansion of materials at cryogenic temperatures by digital micro-image processing.

Research in the **Materials Testing and Characterization Laboratory** is focused on the investigation of processing-structure-property relationships in advanced materials. Materials of interest include but are not limited to high temperature materials (titanium aluminides and their composites), superplas-

tic materials (titanium and aluminum), superconducting materials, and high-strength conductors and polymeric matrix composites. The program is divided into three areas of specialization: processing and testing, materials characterization, and micromechanical modeling. Research in *processing and testing* employs deformation processing, such as rolling, forging or wire drawing to improve the mechanical properties of materials. Research in *materials characterization* aids in the improvement of the mechanical properties of materials by identifying and measuring vital metallurgical parameters at several stages of processing. The microstructural characterization facility consists of optical microscopes, an X-ray diffractometer, a scanning electron microscope, and an environmental scanning electron microscope. Research in *micromechanical modeling* relates the micromechanics to mechanical properties such as stress, strain rate and hardness.

Research in the **Micro and Nano Scale Research Laboratory** brings together microscale and nanoscale methods and techniques to design, fabricate and characterize unique nanostructures, nano electro mechanical systems (NEMS), and hybrid devices. A particular focus is placed on nanostructure synthesis and fabrication, optimization of nanostructure synthesis processes, the synthesis of novel nanomaterials, developing new techniques for nanomanufacturing, and nanoscale characterization. Research activities in novel nanomanufacturing involve developing techniques for micro-to-nano integration and guided self-assembly. These techniques provide a basis for device architecture and present a platform for nanoscale characterization. In this context, the microscale and MEMS devices become tools for the interrogation and unique characterization of the nanoscale, and micro-nano interfaces and junctions. A significant effort is placed toward understanding and characterizing the behavior and material properties of self-assembled systems formed across lengths scales.

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 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 Masters degree in Material Science.

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, Material 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 minimum combined GRE score of 1150. 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, resume, and three letters of recommendation. Please visit the department Web site for additional details: <http://www.eng.fsu.edu/me>.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new 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), EGM 5653 Theory of Elasticity, 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 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 Masters Thesis Defense (0).

II. Non-Thesis Option

The non-thesis option requires thirty-three credit hours, of which at least thirty credit hours must be letter-graded courses. Students must complete twenty-one credit hours of coursework within mechanical engineering. Six credit hours may be taken outside the department in any of the following areas: engineering, mathematics, or any science discipline (computer science, physics, etc.). The remaining six credit hours are devoted to an Engineering Design Project or two additional letter-graded courses.

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 Masters Thesis Defense (0).

Masters in Material Science/Mechanical Engineering

Materials Science students must take the following minimum distribution of courses for a total of thirty credit hours:

Core Courses

Twelve credit hours: ECH 5934 Materials Thermodynamics and Kinetics (3), EMA 5930 Special Topics: Synthesis and Processing of Advanced Materials (3), EML 5930r Special Topics in Mechanical Engineering (3) and PHY 6937 Materials Characterization (3)

Research Methods

Three credit hours: ECH 5052 Research Methods (3)

Specialized Courses

Nine credit hours: Select three graduate-level, letter-graded courses from one of the following specialized areas: (1) Nanoscale Materials, Composite Materials and Interfaces, (2) Polymers and Bio-Inspired Materials, (3) Functional Materials, (4) Computational Materials and Mechanics. A complete list of available courses is available online at <http://materials.fsu.edu>.

Thesis

Six credit hours: EML 5971 Thesis (3-6) and EML 8976 Masters Thesis Defense (0).

Doctor of Philosophy

Admissions

PhD Program

Prospective students must have MS degree in Mechanical Engineering or any one of the following related fields: any Engineering Major, Chemistry, Computer Science, Material 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 minimum combined GRE score of 1150. 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, resume, and three letters of recommendation. Please visit the department Web site for additional details: <http://www.eng.fsu.edu/me>.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

BS-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, student 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 & Mathematics

Students must complete six credit hours of general engineering and advanced mathematics courses. One of those courses must be EML 5930 - Special Topics in Mechanical Engineering. 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 electives. Courses may be taken in any engineering program, mathematics, and/or any science discipline.

BS-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 three areas:

General Engineering & Mathematics

Students must complete six credit hours of general engineering and advanced mathematics courses. One of those courses must be EML 5930 - Special Topics in Mechanical Engineering. The remaining course must be from the approved course list. See department Web site for approved list.

Core Courses

Students must complete nine credit hours of core courses in their chosen depth area.

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 second semester (fourth semester for BS-PhD students). The exam is designed to evaluate a student's grasp of a specified spectrum of Mechanical Engineering and their ability to think creatively. It consists of both written and oral examinations and is administered each spring. After passing the exam the student will be granted doctoral candidacy status.

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 followed by an oral examination in the general area of the dissertation.

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.

Definition of Prefixes

EGM—Engineering Sciences

EGN—Engineering: General

EMA—Materials Engineering

EML—Engineering: Mechanical

Graduate Courses

EGM 5444. Advanced Dynamics (3). Prerequisites: EGN 3321; EML 3220; 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 5653. Theory of Elasticity (3). Prerequisite: EGM 5611. This is an introductory course which provides background necessary to mechanical engineers who wish to pursue the area of theoretical or analytical solid mechanics. Topics include Cartesian tensors, kinetics and kinematics of motion, constitutive equations, linearized theory of elasticity, and solutions to 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.

EGM 5456. Introduction to Computational Mechanics (3). Prerequisite: MAP 4402. Familiarizes students with the procedures, stability, advantages, and disadvantages of numerical discretization, as applied to solution of common engineering problems. Emphasizes numerical experimentation, cost effectiveness, and range of applicability.

EMA 5226. Mechanical Metallurgy (3). Prerequisites: EGM 3520; EML 3234. Tensile instability, crystallography, theory of dislocations, plasticity, hardening mechanisms, creep and fracture, electron microscopy, composite materials.

EMA 5514. Optical and Electron Microscopy (3). Prerequisite: EML 3012C or instructor permission. Fundamentals and techniques of optical and electron microscopy as applied to the determination of physical, chemical, and structural properties of materials and materials behavior in practice.

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; EGM 3520; 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 3100, 3140, 3701; PHY 3101. 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 and 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 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. The application of materials predicated on material science and engineering case studies covering most engineering applications.

EML 5709. Fluid Mechanic 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). Prerequisites: EML 3101, 3701. 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: EGN 5456; 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, micro-processor system design and computers, kinematic equations, and motion trajectories.

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 5905r. Directed Individual Study (1-6). (S/U grade only.) Prerequisite: Instructor permission. May be repeated to a maximum of twelve 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. Topics in mechanical engineering with emphasis on recent developments. Content and credit will vary. Consult the instructor. May be repeated to a maximum of twelve semester hours.

EML 5935r. Mechanical Engineering Seminars (0). (S/U grade only.) May be repeated to a maximum of ten times.

EML 5946r. 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. Thesis (3-6). (S/U grade only.) A minimum of six semester hours is required.

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 (1-12). (S/U grade only.) May be repeated to a maximum of forty-eight 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.

MEDICINE

COLLEGE OF MEDICINE

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

Department of Biomedical Sciences-Chair: Richard Nowakowski ; **Professors:**

Overton, Blaber, Diaz, Galasko, M. Hurt, M. Johnson, Levenson, McGee,

Meredith, Nowakowski, Ouimet, Patrick, Romrell; **Associate Professors:**

Arbeitman, Blackmon, Horabin, Kabbaj, Kato, Laywell, C. Lee, Megraw,

Olcese, Stefanovic, Wang, Yu, Zhou; **Assistant Professors:** Cappendijk,

Gunjan, Kumar, Paik; VanLandingham, Zhu; **Eminent Scholar:** Bhide;

Assistant Scholar Scientists: Bienkiewicz, McCarthy; **Assistants in**

Medicine: Didier, Kao;

Department of Clinical Sciences Chair: Ricardo Gonzalez-Rothi; **Professors:**

Berg, Bertolette, Bland, Bradley, Gonzalez-Rothi, Hartsfield, Maitland,

Muszynski, Watson, Wetherby; **Associate Professors:** Appelbaum, Danforth,

Manting, Stavros; **Assistant Professors:** Giannini, K. Lee, Parsley;

Department of Family Medicine and Rural Health-Chair: Daniel Van Durme;

Professors: Beitsch, G. Bellamy, Dunn, Fogarty, Littles, McLeod, Stine, Van

Durme; **Associate Professors:** Baker, K. Campbell, R. Campbell, Harrison,

Rodriguez; **Assistant Professors:** Blackburn, Goodwin, Myers, Quintero,

Saunders, Smith-Barron, Tsilimingras; **Associates in Medicine:** Clark;

Assistants in Medicine Aubrey, Geletko, LaJoie;

Department of Geriatrics-Chair: Kenneth Brummel-Smith; **Professors:**

Brummel-Smith, Granville, Kapp, Lloyd, Pomidor; **Associate Professors:**

Agens, Suchak; **Assistant Professors:** Turner;

Department of Medical Humanities and Social Sciences-Chair: Janine Edwards;

Professors: Edwards, Flynn, Glueckauf; **Associate Professor:** Gerend, Hayes,

Reyes; **Assistant Professors:** Bernat, Driscoll, Gabriel, Nair-Collins, Painter,

Rosado; **Assistant In:** Sualdea

For a complete listing of part-time clinical faculty, please visit the FSU

College of Medicine Web site at <http://www.med.fsu.edu/Directory/default.aspx>

and click *Clerkship Faculty*.

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 grad-

uate 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, specifi-

cally to serve currently underserved populations, i.e., rural, inner city, minor-

ity, and geriatric patients in the state of Florida.

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 pro-

gram 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 in-

creasing coordination and integration of traditional disciplines. Undergraduate

majors in biology, biochemistry, chemistry, microbiology, or other life sci-

ences are suitable for graduate studies in biomedical sciences. Research rota-

tions 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 environ-

ment. 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*.

Definition of Prefixes

- BCC**—Basic Clinical Clerkship
BMS—Basic Medical Sciences
GMS—Graduate Medical Sciences
IHS—Interdisciplinary Health Sciences
MEL—Medical Science Electives

Graduate Courses

BCC 7112. Internal Medicine (8). 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. Advanced Internal Medicine Clerkship (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 (8). Prerequisites: Satisfactory completion of all year-one and year-two curricula. 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 (3). Prerequisites: Satisfactory completion of all year-one and year-two curricula. This three-week course in year three 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 under the supervision of a preceptor. Students work as a team 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. Advanced Family Medicine Clerkship (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.

BMS 6015. Doctoring 101 (3). (P/F grade only.) This course is an introduction to the biopsychosocial model of health and illness and the application of the behavioral sciences to understanding and treating patients. Students learn the principles of the patient-centered clinical method and approaches to analyzing ethical issues in patient care.

BMS 6016. Doctoring 102 (5). (P/F grade only.) This course is a continuation of the first-year doctoring course. It emphasizes normal biobehavioral development across the life-span.

BMS 6017. Doctoring 103 (5). (P/F grade only.) This course is a continuation of the first-year doctoring course. It emphasizes an introduction to diagnostic reasoning and clinical decision-making.

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 6110C. Clinical Microscopic Anatomy and Laboratory (4). (P/F grade only.) The microscopic anatomy and functions of the cells, tissues, and glands comprising the organs and systems of humans.

BMS 6115C. Clinical Anatomy, Embryology and Imaging (10). (P/F grade only.) This course provides a basic understanding of the entire body and serves as a foundation for the remainder of the student's medical education. It is designed to present the applications of anatomy and embryology to the clinical sciences, and for the use of radiologic imaging in the diagnosis of clinical disorders. Students are introduced to anatomical terminology commonly used in medicine today, which, in conjunction with the acquired anatomical knowledge base is reinforced in the integrated format of the full four-year curriculum.

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 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 6824r. Cross-Cultural Medicine (2). (P/F grade only.) This course exposes students to delivery of primary care in a cross-cultural and cross-language setting. This is a cultural immersion experience in which students work and live together in the community they serve. The clinical work takes place during spring break. Students are expected to participate in the planning and organization of the experience prior to the clinical week. May be repeated to a maximum of four semester hours.

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.

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.

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.

MEL 6141. Medical Spanish I (2). (P/F grade only.) This course includes formal class lectures, group discussion, roleplaying, and Web-based exercises. The class primarily addresses the needs of medical students with little or no experience with Spanish. Students receive instruction in the essentials of Spanish grammar and expand their knowledge of Spanish vocabulary with an emphasis on medical terminology. Students are also exposed to pertinent information about Hispanic cultures, particularly those dimensions that may impact the quality of provider-patient communication.

MEL 6142. 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.

Fourth Year Electives

In the fourth year of study, the 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 <http://www.med.fsu.edu/education/Curriculum/>.

Department of MODERN LANGUAGES AND LINGUISTICS

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.fsu.edu/~modlang/>

Chair: William Cloonan; **Professors:** Cloonan, Fernandez, Galeano, Hargreaves, Leparulo, Munro, Pietralunga, Sharpe, Walters; **Associate Professors:** Alvarez, Boutin, Cappuccio, Efimov, Gomariz, Lan, Leeser, Leushuis, Maier-Katkin, Poey, Reglero, Romanchuk, Sunderman, Wakamiya; **Assistant Professors:** Gonzalez, Howard, Valisa, Wang, Weber, Zanini-Cordi; **Associate in Modern Languages:** Schlenoff; **Assistants in Modern Languages:** Awad, Brandl, Feng, Gray, Osborn

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 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 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.

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 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. Some national honor societies require that thirty-five hours of coursework be taken with a letter grade. The MA degree program normally takes two years but may be completed in as little as one year.

Required courses include Old French, and one course in each century. Francophone literature (includes Quebecois or Black 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: 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 the MA reading list (see above). 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 Web site 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. (Some national honor societies require that thirty-five hours of coursework be taken with 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. Courses in twentieth Century and Francophone Studies typically include Studies in Pre-War French Literature, Studies in Post-War French Literature, Franco-American Cultural Wars, French Literature of the Black Atlantic, Immigration and National Identity in France, Post-Colonial Cultures in France, France and Algeria: National and Human Rights, Post colonialism and Francophone Literatures, Violence and Nationalism in the Francophone Novel and Film. 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. 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 Web site for further details.

Requirements for the Master of Arts (MA) in German Thesis Program

A minimum of thirty semester hours of credit in graduate courses, including minor, if any, and six hours of thesis credit. At least eighteen of the total of thirty hours must be taken on a letter grade basis. The thesis must be submitted to the Supervisory Committee at least ten days before the oral defense of the thesis, which must be no less than one week prior to the date set for submitting the thesis to Graduate Studies.

Course Program

A minimum of thirty-two semester hours of credit in graduate courses (including minor, if any), at least twenty-one of which must be taken on a letter grade basis.

Master's Comprehensive Examination will be on the courses taken in the MA Program. Questions will be specific in nature, will normally be of the essay type, and will be written in a period of eight hours (normally in two periods of four hours 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. It is the student's responsibility to register for degree examinations (GEW 8966) during the regular registration period, in the semester the student expects to receive the degree. It is also the student's responsibility to make all necessary arrangements with the Registrar's Office concerning his/her diploma, fees, degree clearance, etc.

German Studies

The German Division also offers an MA in German Studies. This degree requires a thesis. The courses are determined in consultation with the major professor.

Reading Portfolio

Each candidate for an MA in German or German Studies must complete the reading list. Each student will compile a portfolio based on readings selected in consultation with the major professor. This portfolio must be completed before the degree is awarded. Please see the departmental Web site 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, Film, History, Humanities, Interior Design, International Affairs, Music, Philosophy, Political Science, Religion, Theatre, Urban and Regional Planning.

Thesis type: to qualify for a master's degree under this 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. The student must submit an acceptable thesis, for which not less than three nor more than six semester hours of credit will be received. A prospectus of the thesis must be approved by the Supervisory Committee in advance of beginning the thesis itself. The thesis must be submitted in four copies to the Supervisory Committee at least two weeks before the Oral Defense of the

thesis, which must be no less than two weeks prior to the date the candidate expects to receive the degree. After the thesis is approved and signed, two copies must be filed with the FSU (Strozier) Library, one with the major professor, and one with the Graduate Program Office of the Department of Modern Languages and Linguistics.

Course type: To qualify for a Master's degree under this program, 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.

Master's Comprehensive Examination is based on courses taken by the candidate and additional individualized readings prepared in collaboration with specific professors. In the minor or related field(s), questions will be on coursework only. Members of the examining committee will be appointed by the division coordinator. MA examination questions are expected to elicit substantive critical essays. Questions will be written within a period of eight hours (normally in two periods of four 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. It is the student's responsibility to register for degree examinations during the regular registration period. In the semester the student expects to receive the degree, it is also the student's responsibility to make all necessary arrangements with the Registrar's Office concerning his/her diploma, fees, degree clearance, etc. Please see the departmental Web site 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-two 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). In the course-type program a minimum of thirty-two semester hours is required.

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 is designed as a field examination. The written exam will cover both the courses an individual student has taken and the general master's reading list required of all graduate students. 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.

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-two semester hours of coursework. At least twenty-one of these hours must be taken on a letter-grade basis (A, B, C). For both thesis and course-type MA 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 FOL 5934, Research and Practice in Second Language Instruction (3) during the Fall semester of their first year. Upon recommendation by the Division, 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 & 19th Centuries, and 20th & 21st Centuries) and two in Latin American Literatures and Cultures (from different time periods, such as Colonial, 19th Century, and 20th & 21st Centuries). Courses corresponding

to each area can be found on the Spanish Division Web site. 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 / Phonology, Morphology, 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 Division Web site. 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. 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).

Minor Field of Study

If the student elects to have a minor within the department, nine semester hours must be earned in courses in this minor field. Current minors include Amazonian Studies, Luso-Brazilian Studies, Second Language Studies, among others. A minor *outside* the department will be *in addition* to the required coursework in Spanish/Modern Languages; specific details will be coordinated with the particular department.

Master's Comprehensive Examination (for both thesis-type and course-type program)

The examination in the Literatures and Cultures areas is based on the MA reading lists; in Linguistics the examination is based on reading lists prepared in consultation with the examining professor(s). The Examination Panel will be composed of Spanish and Portuguese Division 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. Students in the specialization in Linguistics and Literature must take at least one exam in Linguistics and one exam in Literature. For students choosing to do a minor, it is the student's responsibility to find a professor from the minor area who will prepare and grade the exam for that area. If the student elects to have a minor within the department, that area exam replaces one area exam so that the student will take the regular total of three exams. However, if the student elects to have a minor outside of the department, that area exam will be in addition to the three exams (the student takes a total of four exams). 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). All of these must hold Graduate Faculty Status. The Committee is appointed by the department chair upon recommendation of the Major Professor. A prospectus of the thesis must be approved by the Supervisory Committee before registering for SPW 5971r. 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. Copies of the thesis must be submitted to the Supervisory Committee at least two weeks before the Oral Defense of the thesis, which must be no less than two weeks before the date the candidate expects to receive

the degree. The student must register for MA Thesis Defense, SPW 8976, in the semester the defense is to take place. Please see the departmental Web site for further details on manuscript submission.

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 or linguistics. The student is expected to become familiar with past and current achievements in the field and demonstrate the ability for original scholarly research. 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 also 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 advisor and the Director of Graduate Studies (DGS).

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 DGS. Courses taken to satisfy the distribution requirement can also be counted toward the major or minor. Take, for instance, a student who decides to specialize in nineteenth century (major) with a sub-specialization in the Maghreb (minor). In that case the nineteenth century and Maghreb courses would count toward the major/minor requirements as well as the distribution requirements. 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. This could involve work in such areas as theory, autobiography, women's studies, colonialism/post-colonialism, etc., and not necessarily standard century-based fields. 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. We encourage students to develop a secondary area of specialization, which can be easily done while satisfying the requirements stated above. The DGS will work with every entering graduate student in order to work out a program consonant with each one's interests, background and needs. In meeting course requirements, students may supplement regular courses by directed individual studies and directed individual research if appropriate. Please see the departmental Web site for further details.

Doctoral Supervisory Committee: five faculty members constitute the preferred minimum. The Committee shall include the Major Professor, Minor Professor and a representative of the Graduate Faculty from outside the Department of Modern Languages and Linguistics 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 at least Master's Directive Status and three of them - Major Professor, Representative of the Graduate Faculty, as well as one other member - must hold Doctoral Directive Status. The coordinator and the elected member to the Graduate Policy Committee will consider the composition of the proposed Supervisory Committee and forward the list to the Associate Chair for Graduate Studies with recommendation for approval or modification. After the Department Chair has approved, the Dean of the College will be advised of the composition of the committee.

If acceptable to the Major Professor, Divisional Coordinator and Advisory Board, 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 Coordinator and Advisory Board. The doctoral student is expected to include two 6000 level courses.

Doctoral Preliminary Examination: prior to the Doctoral Preliminary Exam, the student must prepare a formal Program of Studies approved by the entire Supervisory Committee and the Associate Chair for Graduate Studies who will file it in the Graduate Studies Office of the department and distribute it to all members of the Supervisory Committee; must demonstrate high-level proficiency in one foreign language or reading knowledge in two (the language or languages chosen must be pertinent to the student's program of research); must be in at least the final semester of the minimum coursework and residence.

International students cannot choose English as a foreign language.

The Doctoral Preliminary Exam (written and oral) is prepared by the Supervisory Committee, with proportionate coverage of both Major and Minor fields and is designed to ascertain the candidate's scholarly competence, the breadth and depth of linguistic and cultural literacy and bibliographical knowledge, and the feasibility of possible dissertation projects. The student is expected to demonstrate some measure of sophistication and expertise in the ability to investigate, analyze, synthesize, interpret, criticize, apply, compare, and expound. The PhD preliminary exam will consist of four questions: 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. 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 is granted after the student has passed the Doctoral Preliminary Exam. A minimum lapse of at least six months between achieving the status "formal candidacy" and the granting of the PhD is required.

Prospectus of Dissertation: after completion of the Preliminary Examination, the student will submit a Prospectus of Dissertation as approved by the Supervisory Committee and the Associate Chair for Graduate Studies for permanent filing in the Graduate Program Office. Any major revision of dissertation topic will be accompanied with a revision of the Prospectus of Dissertation and must be properly approved and filed.

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. When the research and collection of data have reached the stage of exposition, it is recommended that the candidate submit carefully edited preliminary drafts, chapter by chapter, to the Supervisory Committee for suggestions, corrections, and approval. Four complete and approved copies of the final version of the dissertation prepared in accordance with the directions set forth by the University Graduate Program Office, with an abstract of 350 words must be submitted to the Supervisory Committee at least ten days before the Oral Defense of Dissertation. Publication of the dissertation is encouraged. When approval signatures are affixed to the several copies of the dissertation in its final format, three copies must be filed with the Graduate School and one soft bound copy with the Associate Chair for Graduate Studies for the permanent departmental archives. (Students should obtain Guidelines and Requirements for Thesis Writers from the office of the *Dean of Graduate Studies* before starting dissertation.)

Oral Defense of Dissertation: 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.

Requirements for the Doctoral Program 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, 1) Early, 2) Modern, 3) Contemporary, B) Language and Linguistics, a) Formal Linguistics, b) Applied Linguistics, c) 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 Adviser 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 Division of Spanish and Portuguese is required to use courses taken for the BA to satisfy this requirement. All PhD candidates are also required to take: SPW 6806, Research Methods and Bibliography in Literary and Cultural Studies (3) (only for literature specialists); FOL 5932, Quantitative Research Methods in SLA (3) (only for linguistics specialists); FOL 5934, Research Foundations and Practice in Communicative Language Teaching (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.

PhD students may choose to have a minor or a certificate, usually another foreign language or literature, linguistics, Latin American Studies, education, history, etc. If students choose to have a minor or certificate, approximately one-fourth of the courses will be in the minor field. This area will be an additional exam in the Preliminary Examination.

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. Please see the departmental Web site for further details.

Doctoral Supervisory Committee: the Doctoral Supervisory Committee, which guides students through the various steps toward the PhD degree, should be appointed as soon as possible after students have begun PhD studies, that is, no later than in the second semester on campus. A prerequisite to setting up the committee is that students have a general idea of their area of specialization, since the Major Professor must necessarily be a person with special competence in that area. The Supervisory Committee will consist of the Major Professor and at least two members of the Spanish graduate faculty who have Doctoral Directive Status, plus a representative-at-large of the graduate faculty with Doctoral Directive Status drawn from outside the Department of Modern Languages and Linguistics, and the Minor Professor (if any). The at-large representative may also be the Minor Professor. Any other members of the Committee will be chosen from the Spanish faculty and must have at least Master's Directive Status. The committee must include a representative from each area in which the student is to be examined in the Preliminary Examination. Since the University Bulletin states that the appointment of the Major Professor must be mutually acceptable to the Department Chair (who approves the Major Professor), the student, and the professor, the student may, in effect, choose the professor he/she wishes as Major Professor, subject to the approval of the professor chosen. The Major Professor, in consultation with the student, recommends to the department Chair the remaining members of the Supervisory Committee. The department Chair, upon receipt of the form signed by the Major Professor and the committee members, formally appoints the committee. The student will prepare with the Major Professor a proposed Program of Studies. This Program of Studies is placed in the student's file. Additionally, the student will meet with the Major Professor each spring to review his/her progress toward the degree.

Doctoral Preliminary Examination: Before taking the preliminary examination, the student must have a Major Professor and Supervisory Committee, an approved Program of Studies, have completed the language requirements, and have taken SPW 6806. The written Doctoral Preliminary Examination, based on the individually prepared PhD reading lists, coursework, and the doctoral dissertation topic, in consultation with the committee members, is designed to ascertain the candidate's scholarly competence and the breadth and depth of his/her literary or linguistic knowledge. It is the student's responsibility to register for the Preliminary Examination (SPW 8964r) during the regular registration period. **The PhD examination in Iberian and Latin American Literatures and Cultures** consists 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 is a twelve-hour proctored examination consisting of three days with four hours on each day. The use of a dictionary is not permitted. Questions will be specific in nature and may include identifications, essays, and problem-solving questions. If the student does not pass one area on the PhD 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. An oral examination by the committee will be held after having read the written examination. **The PhD examination in the Language and Linguistics track** consists 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 examining professors and will either be an in-class proctored exam or a take-home written exam. If the student has a minor and wishes an examination in a minor area, it is the student's responsibility to find a professor from the minor area who will prepare and grade the questions in that area. The minor area examination will be in addition to the three examinations required in Spanish. If the student does not pass one area on the PhD 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 during 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. An oral examination by the committee will be held after having read the written examination.

Dissertation: The student is officially a "Candidate for the Doctoral Degree" upon passing the written and oral portions of the Preliminary Examination. This candidacy must be achieved at least six months before the granting of the PhD degree. The Dissertation must be on a Hispanic topic and must constitute a significant research contribution to knowledge. After completing the Preliminary Examination but before beginning work, the candidate must submit an acceptable Prospectus of Dissertation to the Supervisory Committee. The Supervisory Committee must approve a Prospectus of the Dissertation before the student enrolls in SPN 6980r. A copy of this Prospectus bearing the signatures of all committee members, must be submitted by the student for inclusion in the student's file. The student must register for two hours of SPN 6980r (Dissertation) every term in which he/she uses the resources of Florida State University. A minimum of twenty-four semester hours of SPN 6980 credit is required. When the research and collection of data have reached the point where the student will begin writing the Dissertation, he/she should submit his/her carefully edited preliminary draft chapter by chapter to the Supervisory Committee for corrections, suggestions, and approval. Hard copies of the final version of the Dissertation, prepared in accordance with the most recent edition of the MLA Style Manual or MLA Handbook for Writers of Research Papers and the Guidelines and Requirements for Thesis, Treatise, and Dissertation Writers (available from the Office of Graduate Studies, 644-3500), together with an abstract in English of a maximum of 350 words, must be submitted to the Supervisory Committee at least four weeks before the Oral Defense of the Dissertation, which must be scheduled no less than two weeks before the candidate plans to receive the degree. The student must register for Dissertation Defense, SPW 8985, in the semester the defense is to take place. The date, time, and place of the defense will be announced at least two weeks in advance by a memo from the Major Professor to the Supervisory Committee, the candidate, the Associate Chair for Graduate Studies, the department Chair, the Dean of the College of Arts and Sciences, the Dean of Graduate Studies, and Media Relations. The Associate Chair for Graduate Studies will in turn publicize the defense to the department. After the Oral Defense and approval of the Dissertation, the student will submit the completed Dissertation to the Office of Graduate Studies. All students must submit their Dissertations electronically. For detailed instructions on the submission process and formatting requirements, see the Office of Graduate Studies Web site, particularly Thesis, Treatise and Dissertation Preparation. In the semester the student expects to receive the degree, it is also the student's responsibility to make all necessary arrangements with the Registrar's Office, the Office of Graduate Studies, and the Associate Chair for Graduate Studies concerning his/her diploma, fees, degree clearance, etc. The student is also responsible for meeting the technical requirements of the Office of Graduate Studies and should consult with that

office soon after starting work on the Dissertation. The PhD Dissertation must be completed within five years of the Doctoral Preliminary Examination, or the examination will have to be retaken.

Definition of Prefixes

- CHI—Chinese
- FOL—Foreign and Biblical Languages
- FRE—French Language
- FOW—Foreign and Biblical Languages, Comparative Literature (Writings)
- FRW—French Literature (Writings)
- GER—German
- GET—German Literature in Translation
- GEW—German Literature (Writings)
- ITA—Italian Language
- ITW—Italian Literature (Writings)
- JPN—Japanese
- LIN—Linguistics
- POR—Portuguese Language
- POW—Portuguese Literature (Writings)
- RUS—Russian Language
- RUT—Russian Literature in Translation
- 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 Web site at <http://www.fsu.edu/~modlang> or the Registrar's Course-Lookup at <http://apps.oti.fsu.edu/RegistrarCourseLookup/SearchForm>.

Departmental Courses

- FOL 5934r. Problems and Studies in Modern Languages and Literature (3).** May be repeated for a maximum of nine semester hours.
- FWO 5025. Critical Theory and Its Application to Non-English Literatures (3).** Critical theory and its application to the reading of literature and, reciprocally, the refinement of theory from the reading of literature. The course is intended not only to introduce the students to major critical theories, but also to guide them in the study of relationships between theory and the reading of literature in their respective language areas. The course is furthermore intended to provide information on how to proceed in independent study of these relationships.
- FOW 6907r. Directed Readings (1–6).** (S/U grade only.) Prerequisite: Instructor or major professor permission. For French and Spanish doctoral students who have completed course requirements. May be repeated to a maximum of nine semester hours.

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 4503. Readings in Chinese History (3).** Prerequisite: Instructor permission. A sketch of Chinese history is introduced. Students are taught to read the text in Chinese so they will be able to expand their vocabulary to include those words necessary to understand Chinese culture and tradition.
- CHI 4905r. Directed Individual Study (3).** 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 4930. Special Topics (3).** Prerequisite: Divisional permission. Allows students to study literary topics of a special kind, depending on student interest and faculty expertise.

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 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 hours may apply to the master's degree. May be repeated to a maximum of five semester hours.

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). Prerequisite: FRE 3421 or equivalent. Based on contemporary materials, this course is intended to develop near-native fluency.

FRE 4422.* Advanced Grammar and Composition (3). Prerequisite: FRE 3421 or equivalent. Emphasis on word distinctions, description, and exposition with an examination of language subtleties. Frequent free composition on pre-chosen subjects.

FRE 4905r. Directed Individual Study (3). 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 permission. 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). Prerequisites: FRW 3100, 3101. An introduction to some of the major works of the period: Yvain, the Romance of the Rose, Christine de Pizan's City of Ladies, lyric poetry of the Middle Ages and Renaissance, the Essais, and Gargantua. Emphasis is on the themes of love, death, and the figure of the woman.

FRW 4433.* 17th- and 18th-Century Literature (3). Prerequisites: FRW 3100, 3101. 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). Prerequisites: FRW 3100, 3101. Gives an overall view of the main literary currents of the century with particular study of several authors chosen to represent the poetry, novel, and drama of the period.

FRW 4480.* 20th-Century Literature (3). Prerequisites: FRW 3100, 3101. A survey of the major works (novel, theater, poetry) and movements of 20th-century French literature.

FRW 4740.* French Literature of Quebec (3). Prerequisites: FRW 3100, 3101. A survey of the major works (novel, theater, poetry) of the literature of 20th-century Quebec.

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

Foreign Writings

FOW 5025. Critical Theory and Its Application to Non-English Literatures (3). The 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 will team teach.

French and Francophone Language and Culture

FRE 5060. Graduate Reading Knowledge in French (3). (S/U grade only.) 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.) Translation examination to ascertain the student's ability to read research materials written in French. Use of translation software is prohibited.

FRE 5456. Stylistics (3). A systematic study of the stylistics and idiomatic differences between French and English, designed to improve writing skills.

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). 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. 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). 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.

FRE 6925r. Tutorial in Professional Issues (0-2). (S/U grade only.) Prerequisite: FRE 5940 or instructor permission. 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.

FRW 5765r. Studies in Francophone Literatures and Cultures (3). Prerequisite: Graduate Status. 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 credit 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 5315. Classical Theatre of the 17th Century (3). Concentrates on selected works by Racine, Corneille, and Moliere. Each play is analyzed both separately and in relation to other dramas studied. Also, the plays are situated within the social and intellectual context of the seventeenth century.

FRW 5415. Old French Literature I (3). Prerequisite: FRE 5755 required; FRE 5756 recommended. 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 required; FRE 5756 recommended. 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). 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). Depending upon the semester, this course will focus on theatre, prose, or a major figure (e.g., Pascal) or intellectual-religious movement (e.g., Jansenism). May be repeated to a maximum of six semester hours.

FRW 5588r.* Studies in 18th-Century Literature: Figure or Movement (3). 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 5598r. Studies in 20th-Century Pre-War (1900-1940) French Literature: Figure or Movement and/or Genre (3). Authors and movements such as the following are considered: Paul Claudel, Paul Valery, Andre Gide, Marcel Proust, Alain-Fournier, Surrealism, "Unanimisme," Francois Mauriac, Jean Giono, Georges Bernanos, Jean Giraudoux, Roger Martin du Gard, Antoine de Saint-Exupery, Guillaume Apollinaire, etc. Works studied include novels, plays and poetry. May be repeated to a maximum of six semester hours.

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 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 Creolite. May be repeated to a maximum of six semester hours.

FRW 5825. Introduction to Literary Criticism (3). A survey of the major trends in critical theory with an emphasis on recent developments. Includes theory and application.

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.)

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: GER 3400 or equivalent. Course objective is an 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: GER 3400 or instructor permission. An advanced-level skills course. Discussion of current events and mass media in German-speaking countries and work with authentic texts (newspapers, audio, and videotapes).

GER 4905r. Directed Individual Study (3). 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. 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). Offers the opportunity to study either a single author in-depth or to follow a specific theme which may extend over a brief period or over centuries. Course material is often supplemented by recordings and cinematic representations. May be repeated to a maximum of six semester hours.

GEW 4592r.* Studies in a Period or Movement (3). 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 six semester hours.

GEW 4900r. Directed Individual Readings in Literature (3). Students arrange with individual faculty members to study literature outside the regular curriculum. May be repeated to maximum of nine semester hours.

GEW 4930r. Special Topics (3). 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.) 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.) Translation examination to ascertain the student's ability to read research materials written in German. Use of translation software is prohibited.

GER 5425. Essay Workshop (3). 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). Topic determined by student and 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. 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). 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). Studies the works of an individual author or a number of authors composing a specific movement. 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). Studies a certain period or movement 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). 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). 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 3420 and 3421 or equivalents. 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. 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, 3101, or equivalent. Surveys Italian culture and civilization and provides a historical perspective to aspects of Italian society.

ITA 4905r. Directed Individual Study (3). 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 permission. 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). May be repeated to a maximum of nine semester hours.

Italian Literature (Writings)

ITW 4400.* Renaissance Literature (3). Prerequisites: ITW 3100, 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, 3101, or equivalent. 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, 3101, or equivalent. Offers readings and discussions of figures and movements in 20th century Italian literature including Moravia, Svevo, Pirandello, Silone, and others.

ITW 4481.* Readings in Contemporary Italian Prose (3). Prerequisites: ITW 3100, 3101, or equivalent. Offers readings and discussions of works of contemporary Italian writers including Pavese, Cassola, Sciascia, Berto, Ginzburg, Tomasi di Lampedusa, Buzzati, Vittorini, and Viganò.

Graduate Courses

Italian Language

ITA 5060. Graduate Reading Knowledge in Italian (3). (S/U grade only.) 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). Translation examination 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. The 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. 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 6925r. Tutorial in Professional Issues (0-2). (S/U grade only.) Prerequisite: ITA 5940 or instructor permission. 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.

ITA 8966. Master's Comprehensive Exam (0). (P/F grade only.) The examination is based on the Modern Language Association reading lists and represents the five areas of specialization.

Italian Literature (Writings)

ITW 5415. Italian Renaissance Literature (3). Prerequisite: Advanced standing. 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 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). 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 permission. 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

JPN 5900r. Studies in Japanese Language and Literature (3). Prerequisite: JPN 3230 or equivalent. 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.

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). 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 4300. Introduction to Transformational Grammar (3). Exposes students to the underlying principles of the transformational approach to syntax. Students are taught the mechanics of writing transformational rules. Other competing theories of the late 1960s are also discussed so that students can appreciate the strength and weakness of each theory.

LIN 4905r. Directed Individual Study (3). 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). Students arrange with individual faculty members to undertake study in areas outside the regular curriculum.

Graduate Courses

LIN 5035. Historical/Comparative Linguistics (3). This course parallels in breadth, but not in depth, the reading and other assigned outside 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 5510. Transformational Grammar (3). 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 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). Different topics are selected to suit the needs and interests of students. A special effort will be 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). 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 permission. 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

POR 5069r. Graduate Reading Knowledge Examination: Portuguese (0). (S/U grade only.) 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 4410.* Advanced Russian Conversation (3). Prerequisite: RUS 3400. Styles and levels of oral expression on a wide range of topics.

RUS 4421.* Advanced Russian Grammar and Composition (3). Prerequisite: RUS 3420. Practical application of advanced language skills.

RUS 4780.* Phonetics (3). Prerequisite: RUS 3420 or instructor permission. 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 3420 or equivalent. The development of the phonological and grammatical systems from the earliest records to the present.

RUS 4905r. Directed Individual Study (3). 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.

RUS 4935r. Honors Work (3). May be repeated to a maximum of six 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 4370. Russian Short Story and Prose (3). Prerequisite: RUW 3100, 3101, or equivalent.

RUW 4470r. Modern Russian Literature (3). Prerequisite: RUW 3100, 3101, or equivalent. May be repeated to a maximum of nine semester hours.

Graduate Courses

Russian Language

RUS 5069r. Reading Knowledge Examination (0). (S/U grade only.) 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.) Extensive conversation and comprehension practice on contemporary themes. May be repeated once for credit to a maximum of six hours. Not open to native speakers of Russian.

RUS 5845. History of the Russian Language and Reading of Old Russian Texts (3). 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. 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. Course may be repeated to a maximum of nine semester hours.

Russian Literature in Translation

RUT 5115. Seminar: Russian Literature in English Translation (3). Classics of Russian 19th- and 20th-century prose. No Russian required.

Russian Literature (Writings)

RUW 5335. Russian Poetry (3). Study of the development of poetry, the major writers, and their representative works.

RUW 5375. Russian Short Story (3). Study of 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). Study of 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). Study of 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.

Serbo-Croatian

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.

SEC 4905r. Directed Individual Study (3). 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.

Graduate Courses

SEC 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine semester hours.

SEC 5910r. Supervised Research in Serbo-Croatian (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.

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 4500. Slavic Culture and Civilization (3). Slavic culture and thought from earliest times to the modern era; intellectual currents, art, architecture, folklore, society. The main cultural forces that have helped shape thought, manners, and national consciousness among Slavic peoples.

SLL 4905r. Directed Individual Study (3). 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.

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.) 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.) A minimum of six semester hours is required.

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). Prerequisite: SPN 3311 or equivalent. 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 4440.* Business Writing in Spanish (3). Prerequisites: SPN 3310, 3311. Letter writing, business terminology, doing business in the Hispanic world.

SPN 4700.* Spanish Phonetics (3). Prerequisite: SPN 3311 or equivalent. 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). For Spanish majors and minors (only) with at least six semester hours in Spanish at the 3000 or 4000 level or with permission of the instructor. Scheduled only during the Summer. 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 six semester hours, three hours or 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 SPW 3000 level course or equivalent. Variable topics chosen from Spanish language movements, periods, figures, and problems. May be repeated to a maximum of six semester hours.

SPW 4905r. Directed Individual Study (3). 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.

Graduate Courses

Spanish Language

SPA 5941r. Beginning Speech-Language Pathology Practicum (2-4). (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.

SPN 5060r. Graduate Reading Knowledge in Spanish (3). (S/U grade only.) 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.) Translation examination to ascertain the student's ability to read research materials written in Spanish. Use of translation software is prohibited.

SPN 5795. Phonology of Spanish (3). Prerequisite: A working knowledge of spoken Spanish. 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. 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). 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. 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 5195. Studies in Hispanic Literatures and Cultures (3). Prerequisites: SPN3333, SPW 3030, or instructor permission. 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). 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, will be covered.

SPW 5275r. Spanish 20th-Century Novel (3). 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). Reading and discussion of representative comedias from Spain's Golden Age.

SPW 5337. Spanish Poetry to 1700 (3). 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). Emphasis on 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). Study of the major tendencies and representative poets from the sixteenth century to the Modernist period.

SPW 5357. Contemporary Spanish American Poetry (3). A comprehensive study of the major trends, figures, and schools of Spanish American poetry since Modernismo.

SPW 5365. Spanish American Prose (nonfiction) (3). Study of 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). Study of 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). 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). An examination of the major genres of the period together with readings of some secondary works. Topics: Epic and ballad, Clerecía literature, courtly lyric, Alfonsine works, 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). The study of Spanish-American women writers, focusing on prose fiction, non-fiction and/or drama. Supplementary readings from critical and theoretical works.

SPW 5606. Cervantes (3). An individual survey of Cervantes' literary works, especially *Don Quijote*.

SPW 5757. 20th-Century Mexican Prose (3). An analysis of the novels, stories and essays of the outstanding writers of 20th-century Mexico.

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.) 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.) A minimum of six semester hours is required.

SPW 6806. Research, Criticism and Professional Issues (3). (S/U grade only.) 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). Designed to cover topics not otherwise available in the curriculum. Topics will vary and a particular topic will be announced at least one semester in advance. May be repeated to a maximum of nine semester hours.

SPW 6939r. Seminar on a Spanish American Author (3). An in-depth study of the life and works of a major Spanish American author. The subject of this seminar will vary from year to year. May be repeated to a maximum of six semester hours.

SPW 6980r. Dissertation (1-12). (S/U grade only.) 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

Program in MOLECULAR BIOPHYSICS

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.sb.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. 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, 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 physical or biological science, mathematics, or engineering 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, a combined score of 1100 on the verbal and quantitative sections of the Graduate Record Examinations (GRE), and provide three current letters of recommendation from individuals who are able to assess the applicant's academic and research potential. Official transcripts are also required. International students must score a minimum of 600 on the Test of English as a Foreign Language (TOEFL) or 100 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@fsu.edu.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Financial Aid

Acceptance into the program is accompanied with financial aid in the form of graduate assistantships, health insurance subsidy, and tuition waivers. Additional support of up to \$2000 per student is available during the first two years to enable students to attend national meetings. Travel money is also available for advanced students presenting research at such meetings. 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 adviser) 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 in the department granting doctoral directive status to the student's major professor;
4. Attend one of the following seminar series (though not necessarily the same series every semester) throughout the graduate career, and present at least one seminar each year in the program:
 - BCH 6896r** Biochemistry Seminar (1) (same as BCH 6897r)
 - BSC 6921r** Colloquium in Biological Science (1)
 - CHM 6590r** Physical Chemistry Seminar (1)
 - PSB 6920r** Neuroscience Colloquium (1)
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

1. 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.
2. 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 eight 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]
3. 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.
4. 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 Prefix

MOB—Molecular Biophysics

Graduate Courses

MOB 5905r. Directed Individual Study (1-12). (S/U grade only.) Provides students with an opportunity to gain practical experience using different laboratory techniques, 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 will assure understanding of necessary basic scientific research approaches. May be repeated to a maximum of fifty semester hours.

MOB 5906r. Directed Individual Study (1-12). Replaces MOB5905 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 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.)

MOTION PICTURE ARTS

COLLEGE OF MOTION PICTURE ARTS

Web Page: <http://film.fsu.edu/>

Dean: Frank Patterson; **Associate Dean:** Reb Braddock; **Assistant Dean:** Fred Salancy; **Associate Professor:** Auzenne; **Assistant Professor:** Syder; **Filmmakers in Residence:** Allen, Carruth, Cohen, France, Kaleko, Long, Meyer, Nunez, Scoon, Simmons, Slade; **Dean Emeritus:** Fielding

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 these also have a strong record as research scholars and as writers of fiction. The faculty also includes visiting professors from the field 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 the University Center "A" Building on Florida State University's campus in Tallahassee. Considered one of the finest facilities in the world devoted exclusively to film education, it includes two sound stages; a recording stage with Foley and ADR capabilities; a 120-seat screening theatre and three smaller screening rooms; three digital audio mixing suites; a computer laboratory; a set-building shop; a 35mm archive of feature films; a 5,000 title collection of films on videotape, DVD, and laserdisc; a large production research library; and digital editing suites for picture and sound. Production facilities are available for both digital (HD, 2K, 4K, 5K) and film (16mm, 35mm) production.

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 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.

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 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, script, and story ideas that are proposed and incorporated by students into their workshop 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 of limited access, with twenty-four production and six writing students admitted each year, making admission selective and competitive. Prospective students must make 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/mfa>. Required supporting materials include: a 500–1000 word statement of purpose describing their artistic work, creative influences, personal objectives, relevant background and career goals, three letters of recommendation, a professional/creative resumé, and transcripts. As an option, production applicants may submit a sample of their best work (video, photographs, creative writing sample, etc.). Writing applicants must submit three samples as specified supporting materials. Detailed information is available online at <http://film.fsu.edu>. Students applying to the Motion Picture Arts - Production major are not required to take the Graduate Record Examination (GRE) but official GRE scores must be reported for the Motion Picture Arts - Writing major.

Enrollment Requirement

Because of the integrated and intensive nature of the program, all students will be required to enroll as full-time students. 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 ninety semester hours for production students, or sixty-one semester hours for writing students, and must be completed in six consecutive full-time semesters.

Retention and Evaluation

All students must meet the University's minimum retention standards for graduate studies. Additionally, continuation in the graduate program depends on the development of each student's talent, skill, academic record, and professional discipline. Performance so negative, disruptive, or destructive as to compromise the work of fellow students or the effectiveness of the faculty, and/or the inability to work positively in a collaborative environment shall constitute grounds for probation or immediate dismissal without any prior period of probation. Attendance will be taken at the beginning of all classes. Anyone not in class at that time will be considered absent; anyone leaving class early may also be counted absent. Given the rigorous nature of the conservatory setting, absences are discouraged. Approval of absences is at the discretion of the instructor and will require documentation to confirm legitimacy of the absence.

Any unauthorized use or possession or willful destruction of College of Motion Picture Arts equipment, facilities, film stock, or finished film will result in immediate notification of the proper authorities. The outcome of their decision will determine the actions taken by the College of Motion Picture Arts with respect to the student(s) involved.

The faculty continually assesses each student's work and professional discipline. Peer evaluations will be considered in this process. All graduate film

conservatory students are formally evaluated at the end of each semester. Any candidate who fails to maintain high standards will be placed on probation or dismissed from the program and will receive written notification.

Financial Aid

A limited number of graduate assistantships are awarded by the College of Motion Picture Arts. 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.finaid.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.

Definition of Prefix

FIL—Film

Graduate Courses

- FIL 5021. History and Criticism I (3).** Historical survey of the film medium worldwide, from its invention to the modern era.
- FIL 5022. History and Criticism II (3).** Prerequisite: FIL 5021. Survey of theories and movements in motion picture history.
- FIL 5155L. Screenwriting 1: Techniques and Treatments (2–6).** Prerequisite: MFA admission. Corequisite: FIL 5005. Introduction to working knowledge of basic narrative elements and how these work in conjunction to form a story. Through developing, writing, re-developing, and then re-writing a script, the student will gain the basic understanding of script language and process.
- FIL 5156L. Screenwriting 2: Narrative Techniques (2–6).** Prerequisite: FIL 5155L. Course examines how to create dimensional characters and a well structured story that works in the context of a feature length format through experiencing the writing of a feature film script.
- 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 rewriting 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 5159. Screenwriting V: Motion Picture Workshop (3).** Writing feature-length film scripts fusing the dramatic elements and skills developed in prior courses.
- 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 5429L. Basic Film Production (2–6).** Prerequisite: MFA admission. Basic overview of the MacIntosh computer, the video signal, the film to video telecine process, audio recording, audio and video transferring, and operation of the School's post-production equipment as it relates to editing on the Avid Xpress. Covers basic editing procedures from start to finish—beginning with importing video and audio all the way through to outputting final project. May be repeated to a maximum of eighteen semester hours.
- FIL 5458r. Principles and Practices of Technical and Creative Support (3).** Introduction to the principle technical and creative support positions in motion picture and television production. Delineates the responsibilities and interrelationships of all preproduction, production, and postproduction personnel. May be repeated to a maximum of fifteen semester hours.
- FIL 5459. Practicum in Technical Support (1–12).** Comprehensive practical training for first-year students in below-the-line production and postproduction 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 5484L. 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 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 5499. Acting for the Camera (3). This course will provide students with a survey of traditional acting techniques and will contrast and compare those techniques to more commonly used contemporary techniques of on-camera actors. Students will learn to prepare and execute discussion with on-camera actors from various educational backgrounds.

FIL 5519L. Camera and Light Mechanics (2-6). Provides theoretical and practical knowledge of cinematography: cameras, lenses, film stocks and exposure, composition and lighting, with hands-on exercises. May be repeated to six semester hours.

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 5555L. Film Editing (2-4). Prerequisite: MFA admission. Course examines basic and intermediate training of the editing procedure and practical editing techniques by developing the editing process which is a step-by-step evolution of editing motion pictures involving dailies, the rough-cut, the fine-cut, critique, and addressing emotion, continuity, pace, rhythm, and the smooth cut. May be repeated to a maximum of six credit 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 5591. Production Design Workshop (2-12). Overview of production design principles and practices used in the creation of sets, costumes, props, makeup, and special effects for motion pictures and television. Through lecture, text, and practical application, students acquire an in-depth understanding of how color and form inform character and story. May be repeated to a maximum twelve semester hours.

FIL 5592L. Sound Workshop (2). This course provides a basic working understanding of sound recording of sound recording and the various stages of production and post-production.

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 5594r. Directing: Multi-camera Workshop (3-9). The study, development, and direction of multicamera television productions. May be repeated to a maximum of nine semester hours.

FIL 5595L. 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 5609. Computer Applications Workshop (3). Computer applications for all phases of the motion picture and television industry.

FIL 5635. Distribution and Financing Workshop (3). A comprehensive analysis of the financing and distribution of motion pictures, video products, and television programs with an emphasis on rights acquisition, banking, and legal and contractual procedures and practices.

FIL 5636L. 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 5774r. Basic Video Production (3-6). Prerequisite: MFA admission. Provides a comprehensive overview of the production and delivery of television programming. May be repeated to a maximum of six semester hours.

FIL 5781. Intermediate Television Editing (3). Prerequisite: FIL 5774. Comprehensive survey of online video-editing methods and techniques, including a thorough exploration and usage of time-code technologies, A/B roll editing, switchers, digital video effects, and character generators.

FIL 5782. Advanced Television Editing (3). Prerequisite: FIL 5781. Students will develop an understanding of and skill with various computer-controlled editing systems from personal computers to Sony 910 computer controller.

FIL 5805r. Critical Studies in Film and Television (3). Examination of a particular theoretical or critical approach to film and television. May be repeated to a maximum of nine semester hours.

FIL 5806. Critical Methods in Motion Picture, Television, and Recording Arts (3). Principles and practices of writing film/video criticism.

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, Television, and Recording Arts (3). Specialized study in film/video history, criticism, theory, genres, movements, and filmmakers. May be repeated to a maximum of six semester hours.

FIL 5930r. Proseminar in Motion Picture, Television, and Recording Arts (1). (S/U grade only.) Interaction with professional film/video makers in screenings and discussions of each others work. May be repeated to a maximum of six semester hours.

FIL 5931r. Special Topics in Motion Picture, Television, and Recording Arts (3-12). Intensive individualized workshop in the student's chosen field of specialization, supervised by a visiting motion picture or television professional. 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 5966. 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.)

MUSIC

COLLEGE OF MUSIC

Web Page: <http://www.music.fsu.edu/>

Professors: Bakan, Beckman, Bowers, Chapo, Clary, Clendinning, Darrow, Drew, Dunnigan, Fenton, Fisher, Frederickson, Gerber, Geringer, Gibson, Hoekman, Keesecker, Kelly, Kowalsky, Kraus, Kubik, Lata, Madsen, Meighan, Ohlsson, S. Olsen, Ryan, D. Seaton, Standley, Thomas, Von Glahn, Welch, Zwilich; **Associate Professors:** Amsler, Anderson, Andrews, Bish, Brewer, Brister-Rachwal, Buchler, Callender, Close, Ebbers, Gaber, Gainsford, Gregory, Gunderson, Holzman, Jimenez, Jones, Jordan, Kennedy, Mathes, Moore, Parks, Peterson, Porter, Punter, Rogers, Roman, Sauer, Shaftel, Stebleton, Trujillo, Van Weelden, M. Wingate; **Assistant Professors:** Barnhart, Ciesinski, Hastings, Kalhous, McKee, Okerlund, Roberts, Stillwell, Sung, Williams; **Visiting Professors:** Broyles, Corzine, Delp, Kite-Powell; **Visiting Assistant Professors:** Akers, Arsenault, Atkins, Byrnes, Carrasco, Connors, Davis, Deng, Filar, Hunt, N. Mastrogiacomo, Nodine, Weissenberger; **Program Directors:** Garee, Hodges, Lima, McArthur, G. Seaton; **Music Specialist:** Sonsiridej; **Faculty Librarian:** TBA; **Associate Librarian:** Cohen

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

Master of Arts in Arts Administration

Master of Music

Accompanying

Choral conducting

Composition

Instrumental conducting

Jazz studies

Music theory

Music therapy

Musicology (both historical and ethnomusicology)

Opera

Performance

Piano pedagogy

Master of Music Education

Doctor of Philosophy in Music Education

Doctor of Philosophy in Music

Musicology

Music Theory and Composition

Doctor of Music in Composition

Doctor of Music in Performance

In addition to its degree programs, the College of Music offers a number of certificate programs that provide an additional specialized area of emphasis for graduate students. These include certificate programs in arts administration, music leadership, sacred music, jazz studies, piano pedagogy, early music, music of the Americas, world music, 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/Music 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). For non-composition majors only. May be repeated to a maximum of six semester hours.

MUC 5251r. Composition (3). Prerequisite: Instructor permission. For composition majors only. May be repeated to a maximum of six semester hours.

MUC 5615r. Film Scoring (3). Prerequisite: Instructor permission. 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. Techniques of creative jazz composition and literature. May be repeated to a maximum of six semester hours.

MUC 6261r. Composition (3). Prerequisite: Instructor permission. For composition majors only. May be repeated to a maximum of six 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). 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). An analysis of 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, 3210, 3311, or teaching experience. Survey of 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. Survey of 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. Techniques of teaching music to children in special education programs.

MUE 5398. Survey of Vocal Diction for Choral Music Educators (2).

MUE 5426–5427. Advanced Techniques in Choral and Instrumental Music (three [3] hours each). Prerequisites: MUE 4411; 4342; or teaching experience. 5426: Choral; 5427: Instrumental.

MUE 5486. Jazz Ensemble Techniques (1). A course designed to study the implementation and administration of the jazz ensemble in the public school music program.

MUE 5498r–5499r. Music Education Laboratory (one [1] hour each). 5498. Choral; 5499. Instrumental. May be repeated to a maximum of two semester hours.

MUE 5938. Introduction to Graduate Studies in Music Education (3). Current issues, bibliography, and introduction to research techniques in music education. Required of master's music education majors.

MUE 5943. Internship in Music (6). (S/U grade only.) Instructor permission.

MUE 5945r. Practicum in Supervising and Directing Education and Research in Music (3). (S/U grade only.) 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.) 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.

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 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, emotional and physiological responses to music. Additional areas of discussion include the role, development and use of standardized testing and observation measures in music.

MUY 5305. Medical Music Therapy (3). The purposes of this course are to understand the role and scope of music therapy in medical treatment; to learn to design music activities in medical situations to reduce pain, anxiety and distress; to participate in field experiences observing medical music therapy practices in a hospital setting; and to learn medical documentation for clinical music therapy.

Conducting

MUG 5205r. Advanced Conducting: Chorus (2). Prerequisites: Graduate standing and experience in conducting. The study of choral literature through analysis and conducting.

MUG 5306. Advanced Conducting: Orchestra (2). Prerequisites: Graduate standing and experience in conducting. The study of orchestral literature through analysis and conducting.

MUG 5307. Advanced Conducting I: Band (2). Prerequisites: Graduate standing and experience in conducting. The study of wind literature through analysis and conducting.

MUG 5308. Advanced Conducting II: Band (2). Prerequisite: MUG 5307. 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.) Required of choral conducting majors in lieu of thesis.

MUG 5976. Wind Ensemble/Band Master's Recital: Chamber (2). (S/U grade only.) The chamber recital 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.) The large ensemble recital required of wind ensemble/band conducting majors in lieu of thesis.

MUG 5978. Master's Recital: Orchestral Conducting (2). The orchestral conducting recital required of instrumental conducting majors (orchestral emphasis) in lieu of thesis.

Jazz Studies

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.

MVJ 5976. Master's Recital: Recital Preparation (2). Preparation of a master's level recital in jazz performance.

MVJ 5978. Master's Recital (2). Performance of a master's level recital in jazz performance.

Music History

MUH 5219. Music History Graduate Survey (2). (S/U grade only.) A synoptic review of the history of music from Greek music to the present day. This course is required of all graduate music majors unless exempted by examination. Credit earned in MUH 5219 will 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 The 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: Musical 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 [3] hours each). 5325: Medieval; 5335: Renaissance; 5345: Baroque; 5355: Classical; 5365: Nineteenth Century; 5375: Twentieth Century.

MUH 5410. The Notation of Polyphonic Music to 1600—Black Notation (3).

MUH 5411. Notation of Polyphonic Music II (3). A study of 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). A study of the musical cultures of Latin America, including Native American, European, African, and Asian derived, and syncretic or mestizo forms.

MUH 5547. Music in Latin America II (3). A study of the religions and art music of Latin America from the colonial period to the present.

MUH 5548. Music in the Caribbean (3). A survey of 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 will be on gamelan music, especially that of Java and Bali. Popular and experimental Indonesian musical forms, as well as Indonesian-inspired music by Western composers, also will be investigated.

MUH 5577. Music of Japan (3). A study of 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. An introduction to the history, theory, and literature of ethnomusicology.

MUH 5581r. Seminar in Ethnomusicology (3). Prerequisite: MUH 5580. In-depth study of a particular approach, theory, or methodology in ethnomusicology, as espoused by a particular person or school of thought. Students will 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). The 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). 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). A survey of musical activities in the United States from the earliest settlements through the Civil War.

MUH 5636. Music in the United States II (3). A survey of musical activities in the United States from the close of the Civil War to the present.

MUH 5655. Seminar in Performance Practice (3). 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). An introduction to the history, scope, and sources of musicological research.

MUH 5686r. Seminar in Historical Musicology (3). Prerequisite: MUH 5685. 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) (2). A study of 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) (2). A study of the evolution of jazz, including the study of Cool, Hard Bop, Free, Post Bop, and Pop-Jazz styles.

MUH 5939. Seminar in Organology (3). This course surveys the classification and constructional principles of musical instruments and how these affect aspects of the instruments' historical and cultural significance and musical performance.

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). 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). 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 (two [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). A study of chamber music literature for strings alone, strings with keyboards, and strings with other instruments.

MUL 5435. Guitar Literature I (2). A study of guitar literature from the Renaissance to the Pre-Classical.

MUL 5436. Guitar Literature II (2). A study of guitar literature from the Classical Period to the present.

MUL 5445, 5446. Solo Music Literature Seminar—Winds (three [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). A survey of the major schools of organ composition, with particular emphasis on the contribution of organ music to the liturgy of the Western church.

MUL 5505, 5506. Symphonic Literature I, II (3, 3). Prerequisite: MUH 3212 or equivalent.

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). A survey of the sacred vocal literature available for the liturgical year.

MUL 5620. Graduate Survey: German Vocal Solo Literature (1). A review of 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). A review of French vocal solo literature for students who do not have the prerequisite repertoire knowledge for MUL 5625.

MUL 5624, 5625, 5626, 5687. Solo Music Literature Seminar—Voice (two 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; 5687: Oratorio.

MUL 5645. Choral Literature (2). Prerequisite: Graduate standing in music. The study of choral compositions from Palestrina to the present day, with special attention to the larger forms.

MUL 5647. Survey of Sacred Choral Literature (1). A survey of sacred choral literature suitable for medium size choirs in churches and synagogues embracing Catholic, Protestant, or Jewish faiths.

MUL 5656. Choral Masterworks: Romantic/Contemporary (3). A study and analysis of large choral-orchestral masterworks from the Romantic and contemporary periods.

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 5852. The Music of W.A. Mozart (3). An examination of selected works, with special attention to form and style.

MUL 5936r. Special Topics in Music Literature (1-3). The study of 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). 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. Instruction in the fundamentals of upright and grand piano regulation, minor repairs, and practical tuning skills.

MUM 5256. Piano Technology Practicum I (3). Prerequisite: 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). Prerequisite: 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). Prerequisite: 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). Prerequisite: 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). Course covers the basics of arts administration and is a core course in the degree program. 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 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.) Internship in an arts administration setting, including a final written project. May be repeated for a maximum of twenty-four semester hours.

Music Ensembles

Note: All ensemble courses are repeatable.

MUN 5115r. Marching Chiefs (0-1). Prerequisite: By audition. 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). 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. 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. 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). 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. 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 5225r. Chamber Orchestra (0-1). Prerequisite: By audition. The study and performance of works suitable for chamber orchestra. Open to selected graduate students. May be repeated to a maximum of four semester hours.

MUN 5235r. Opera Orchestra (0-1). Prerequisite: By audition. The study and performance of works drawn from grand opera, operettas, and musicals. May be repeated to a maximum of four semester hours.

MUN 5315r. University Singers (0-1). Prerequisite: By audition. 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). The reading, study, and performance of choral repertoire for mixed voices. Open to all University students. May be repeated to a maximum of four semester hours. Student has option to repeat during the same semester.

MUN 5325r. Women's Glee Club (0-1). 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). 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 four semester hours.

MUN 5345r. Chamber Chorus (0-1). Prerequisite: By audition. 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 four semester hours.

MUN 5355r. Opera Chorus (0-1). Prerequisite: By audition. 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). 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 four semester hours. Student has option to repeat during the same semester.

MUN 5415r. String Ensemble (0-1). Prerequisite: By audition and/or instructor permission. The study and performance of works for string ensemble. May be repeated to a maximum of four semester hours.

MUN 5425r. Woodwind Ensemble (0-1). Prerequisite: Instructor permission. 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. 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. 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. 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. 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. 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 four semester hours.

MUN 5478r. Baroque Ensemble (0–1). Prerequisite: Instructor permission. May be repeated to a maximum of four semester hours.

MUN 5485r. Guitar Ensemble (0–1). Prerequisite: Instructor permission. 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. 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. 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 four semester hours. Student has the option to repeat during the same semester.

Opera/Music Theatre

MUO 5006r. Musical Theatre Workshop (2). Prerequisite: Music theatre major or instructor permission. The study of 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 (10) semester hours.

MUO 5505r. Opera (0–4). Prerequisites: Audition; instructor permission. The craft of the singer-actor is addressed in this comprehensive course 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). Prerequisite: Interview; instructor permission. 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). Prerequisite: Interview; instructor permission. An exploration of 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). 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). 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

MUL 5426. String Quartet Literature from Haydn to Bartok and Beyond (2). Students in this course study several important string quartets in the literature, with a focus on understanding the development of the genre through time and improving listening skills through analysis of pieces studied.

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). Understanding the world of commercial music and techniques in personal marketability.

MUS 5345. Music Instrument Digital Interface (3). Corequisite: MUS 5346. Develop techniques in electronic music composition and all aspects of MIDI.

MUS 5346r. Laboratory for Music Instrument Digital Interface (2). Corequisite: MUS 5345. 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 is an introduction to music technology. Course includes units in music notation, MIDI and sequencing, an overview of music software, and an overview of music multimedia hardware systems.

MUS 5536. Multimedia for Musicians (3). Prerequisite: MUS 3500 or 3540 or instructor permission. Provides students with a basic knowledge of multimedia hardware and software systems, particularly as they relate to music. Students will develop multimedia projects. May be repeated to a maximum of six semester hours.

MUS 5538r. Computers in Music Design Seminar (3). Prerequisite: MUS 5536. Discussions and experiences in music instructional design. May be repeated to a maximum of six semester hours.

MUS 5545. Electronics for Musicians (3). Basic concepts and practical experience in digital and analog electronics for musicians.

MUS 5546. Digital Music Synthesis I (3). Prerequisite: Instructor permission. This course will provide 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 will provide students with basic knowledge of both digital and analog sound distortion, synthesis and resynthesis techniques, and will allow them to explore the technology and art of digital and music production.

MUS 5616. Psychology of Music (3). Basic study of acoustics, the ear and hearing, musical systems, and the processes involved in musical behavior.

MUS 5619. Behavior Modification in Music (3). Behavior modification techniques as applied to music education and music therapy.

MUS 5711. Music Bibliography (2).

MUS 5721. Music Perception and Cognition (3). Examination of 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 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 5921r. Symposium in Music (1–6). Music in general education together with study in smaller groups of specialized phases of the music program. May be repeated to a maximum of six semester hours.

MUS 5929r. Workshop in Music (1–6). Techniques in instruction and administration of music programs. May be repeated to a maximum of six semester hours.

MUS 5930. Seminar in Contemporary Instructional Techniques in Music (3). A systems approach to the development of instructional modules in music.

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). Prerequisite: Graduate standing. (S/U grade only.) 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 three semester hours.

MUS 5941r. Internship in Music Performance (1–12). (S/U grade only.) Advanced performance activities in an internship setting. May be repeated to a maximum of twenty-four semester hours.

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. Major scholarly and/or performance project.

MUS 6907r. Directed Individual Study (1–3). (S/U grade only.) Prerequisite: Instructor permission. May be repeated for maximum credit 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, 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.

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.

Music Theory

MUT 5051. Graduate Theory Survey (3). A review of the tonal materials of the period of common harmonic practice. This course is required of all graduate music majors unless exempted by examination. Credit earned in MUT 5051 will not apply to credit-hour requirements of any degree in the College of Music.

MUT 5151. Introduction to Graduate Study in Music Theory (3). 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. A course designed to promote skills in arranging for the jazz ensemble.

MUT 5358. Jazz Theory/Arranging II (3). Prerequisite: MUT 5357 or instructor permission. Advanced skills in arranging for the jazz ensemble.

MUT 5381. Composing and Arranging for Wind Band (3).

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 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). An analytical study of masterworks from Bach to Bartok, including consideration of style, harmony, form, scoring, and theory.

MUT 5619. Vocal Forms (3).

MUT 5625. Instrumental Forms (3). The evolution of the concerto and the symphony.

MUT 5627. Introduction to Schenkerian Analysis (3).

MUT 5629. Schenkerian Theory and Analysis II (3). Prerequisite: MUT 5627. This is an advanced course in analytical techniques as proposed by Heinrich Schenker.

MUT 5628. Atonal Analysis (3). Techniques for the analysis of non-serial atonal music.

MUT 5646r. Jazz Improvisation I (1). Prerequisite: Music reading. 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. Advanced skills in jazz improvisation. May be repeated to a maximum of three semester hours.

MUT 5655. Writing Skills: 16th-Century Counterpoint (3). Sixteenth-century imitative writing styles.

MUT 5656. Writing Skills: Fugue (3). Fugal writing styles.

MUT 5751–5752. Pedagogy of Music Theory (three [3] hours each). Basic concepts in the teaching of music theory.

MUT 5760. History of Music Theory (3). An overview of music theory from Greek Antiquity through the 19th-century and a survey of historically significant theorists and treatises.

MUT 6937r–6938r. Doctoral Seminar in Music Theory (three [3] hours each). Each may be repeated to a maximum of six semester hours.

Music Therapy

MUY 5411. Music in Counseling (2). 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). The study and 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). Research problems of music in therapy and special education.

MUY 5946. Graduate Clinical Project (6). A 20 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 5050. Applied Music Graduate Coaching (1–2). All instruments. Principal only.

MVO 5055. 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. Class instruction. 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. Class instruction. For dance and theatre majors. Fundamentals of voice production. May be repeated to a maximum of two semester hours.

MVS 5156. Beginning Class Guitar (1). For beginning graduate guitar students. Includes beginning acoustical guitar techniques, guitar accompaniment skills, and song leading skills.

MV(B, H, K, O, P, S, V, W) 5250r–5259r. Applied Music Secondary (two [2] hours each). 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.

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 5252r. App Mus Sec, Open Reeds (1–2)

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

MVW 5251r. App Mus Sec, Flute

MVW 5252r. App Mus Sec, Oboe

MVW 5253r. App Mus Sec, Clarinet

MVW 5254r. App Mus Sec, Bassoon

MVW 5255r. App Mus Sec, Saxophone

MV—(B, J, K, O, P, S, V, W) 5350r–5359r. Applied Music Principal (two [2] hours each). Private instruction. 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

MVW 5351r. App Mus Prin, Flute

MVW 5352r. App Mus Prin, Oboe

MVW 5353r. App Mus Prin, Clarinet

MVW 5354r. App Mus Prin, Bassoon

MVW 5355r. App Mus Prin, Saxophone

MV—(B, K, O, P, S, V, W) 5450r–5456r. Applied Music Major (four hours each.) Private instruction. Major instrument. For performance majors. May be repeated to a maximum of twenty-four semester hours. Credit may be modified by electing MVO 5450 (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
MVW 5451r. App Mus Maj, Flute
MVW 5452r. App Mus Maj, Oboe
MVW 5453r. App Mus Maj, Clarinet
MVW 5454r. App Mus Maj, Bassoon
MVW 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). Required of string performance majors. May be repeated to a maximum of four semester hours. May be repeated in the same semester.
MVV 5552r. Musical Theatre Repertoire (1). Prerequisite: Instructor permission. For musical theatre majors. May be repeated to a maximum of four semester hours.
MVS 5556r. Guitar Repertory (1). Prerequisite: Instructor permission. Required of guitar performance majors. May be repeated to a maximum of four semester hours.
MVK 5605. Organ/Harpsichord Pedagogy (2). Prerequisite: Instructor permission. Equips students with teaching skills in organ/harpsichord.
MVO 5650. Pedagogy for Winds and Percussion (3). 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.
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. 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. Current and expanded pedagogy concepts and materials and techniques for teaching advanced or adult students.
MVK 5671. Practicum in Piano Pedagogy (2). Practical experience in individual and group teaching as well as supervision and administration of a piano studio.
MVK 5681r. Applied Music Major: Piano Pedagogy (4). Private instruction. For piano pedagogy majors. May be repeated to a maximum of twenty-four semester hours.
MVW 5705r. Introduction to the Baroque Flute (1). Prerequisite: Instructor permission. 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.
MVW 5706r. Introduction to the Baroque Recorder (1). Prerequisite: Instructor permission. 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). Techniques, artistic skills, and repertory for vocal accompanying.
MVK 5711. Piano Accompanying—Instrumental (1). Techniques, artistic skills, and repertory for instrumental accompanying.
MVK 5730r. Applied Music Major, Vocal Accompanying (4). Private instruction. For accompanying majors. A study of 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). Private instruction. For accompanying majors. A study of the 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). 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). Techniques and specific skills of accompanying and coaching vocal music, especially art songs.
MVK 5746. Techniques of Coaching Chamber Music (2). Techniques and specific skills of accompanying and coaching instrumental music.
MVK 5747. Techniques of Opera Coaching (2). Techniques and specific skills of playing and coaching operatic repertory.
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. Open to all upper-division organ majors and principals.
MV—(B, K, P, S, V, W) 5955. Certificate Recital (zero [0] hours each). (S/U grade only.) Prerequisite: Instructor permission.
MV—(B, K, P, S, W) 5976–5977. Master's Recital (two [2] hours each). (S/U grade only.) 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. 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.) Required of master's voice performance majors in lieu of thesis.
MVK 5973r. Master's Recital, Vocal Accompanying (1). (S/U grade only.) Required of Master's accompanying majors in lieu of thesis. May be repeated to a maximum of four semester hours.
MVK 5974r. Master's Recital, Instrumental Accompanying (1). (S/U grade only.) Required of Master's accompanying majors in lieu of thesis. May be repeated to a maximum of four semester hours.
MVK 5975. Master's Recital: Piano Pedagogy (0). (S/U grade only.) 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 [2] 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 [2] 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 [4] 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 6469r. App Mus Maj, Certificate
MVW 6461r. App Mus Maj, Flute
MVW 6462r. App Mus Maj, Oboe
MVW 6463r. App Mus Maj, Clarinet
MVW 6464r. App Mus Maj, Bassoon
MVW 6465r. App Mus Maj, Saxophone
MVS 6560r. String Repertory (0–1). Required of string performance majors. May be repeated to a maximum of four semester hours.
MVS 6566r. Guitar Repertory (1). Prerequisite: Instructor permission. 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. Techniques, materials, and repertoire for college/university voice teaching.

MVV 6662. Vocal Pedagogy Seminar II (3). Prerequisite: MVV 6661. 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: Admission to MVK 6732r by qualifying audition. Private instruction. May be repeated to a maximum of thirty-two (32) 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. 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 [1–4] hours each). (S/U grade only.) 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) 6987. Studio Recital/Lecture Recital: 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

Interdisciplinary Program in NEUROSCIENCE

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.neuro.fsu.edu>

Director: Richard Hyson

The program in neuroscience is an interdepartmental and interdisciplinary research and graduate training program which offers training leading to the PhD degree in neuroscience. Program faculty members are based in four departments: biological science; psychology; mathematics; and biomedical science. 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 adviser and enroll in that adviser'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 adviser and department 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 biology, synaptic physiology, learning and memory, neuroendocrinology/hormone-regulation, neural development and plasticity, neural control of feeding and reproductive behavior, circadian rhythms, cardiovascular regulation, and the genetics of behavior. An NIH-funded training grant is available on a competitive basis to students in the program, providing stipend and tuition. The program maintains specialized research support services and personnel, and provides special courses and symposia on contemporary neuroscience issues. Each semester the program brings to Florida State University prominent neuroscientists who 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 Web site at <http://www.neuro.fsu.edu>.

Admission Requirements

The admission process begins at the neuroscience program Web site at <http://www.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 FSU Online Application system at the time of application. Applications must be complete with all supporting documents by December 1st, for the following Fall admission. Applicants must meet minimum criteria, including a 3.0 undergraduate grade-point average (GPA) for the last two years, and successful applicants normally score above the 70th percentile on all sections of the Graduate Record Exam (GRE) and have relevant research experience. Required supporting documents include three recent letters of recommendation from individuals who are able to assess the applicant's academic and research potential as well as official transcripts. In addition to the above, international students also must meet University standards on the Test of English as a Foreign language (TOEFL). The GRE subject test is not required. Applicants select three neuroscience faculty members as their possible initial adviser, and ideally should contact these faculty members before applying. To ensure consideration by all potential faculty advisers, students who wish to begin PhD training immediately and those who wish ultimately to obtain the PhD in neuroscience should apply directly to the neuroscience program. Those interested only in MS-level training in neuroscience should check with the department of interest. Not all the participating departments nor all neuroscience faculty accept students interested only in MS-level training. Additional information is available on the program Web site or by request to the program office.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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://www.neuro.fsu.edu> for the most current requirements. Florida State 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 in neuroscience are:

1. Successful completion of the doctoral preliminary exam
2. After admission to doctoral candidacy, a minimum of twenty-four semester 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 national, regional or international meetings.
5. Submission and approval of a doctoral proposal
6. Completion of original research work in neuroscience
7. Submission and successful defense of an acceptable dissertation

For additional information, see <http://www.neuro.fsu.edu> or the neuroscience listings in the Biology, Psychology, and Biomedical Sciences in this *Graduate Bulletin*.

NURSING

COLLEGE OF NURSING

Web Page: <http://nursing.fsu.edu/>

Professors: Frank, Karioth, Grubbs, Speake; **Associate Professors:** Cottrell, Hauber, Schmitt, Whyte; **Assistant Professors:** Abendroth, Cormier, Park, Porterfield; **Associates in Nursing:** Little, Pappas, Tucker, Whitten; **Assistants in Nursing:** Bamber, Cuchens, Dickey, Graven, Kendall, McLarty, Studenic-Lewis, Smith, Wheeler

The College of Nursing graduate program offers a Master of Science in Nursing (MSN) degree with role specialization as a nurse educator. The Doctor of Nursing Practice (DNP) degree prepares students for advanced practice as a health systems leader or family nurse practitioner.

Advanced Practice Roles

Health Systems Leaders demonstrate expertise in assessing organizations, identifying systems issues, ensuring patient safety, improving health outcomes, and facilitating organization-wide changes in practice delivery.

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 and pharmacology are required, and current knowledge of pathophysiology is essential. The curriculum is consistent with that defined by the Florida Board of Nursing requirements and regulated by Florida Statutes for Advanced Registered Nurse Practitioners (ARNPs). Students structure clinical experiences and electives to meet prerequisites for writing certification examinations as Family Nurse Practitioners (FNP).

Nurse Educators teach in a variety of settings, including schools of nursing, continuing education, or patient education positions. The course sequence includes theories of teaching, development of teaching methodologies, and program evaluation with practicum experience in a setting of the student's interest.

Nurse Leaders plan, manage, and evaluate cost-effective and evidence-based nursing at the point of care to individuals and groups. The course sequence includes clinical leadership, resource management, informatics, organizational theory, and health promotion and planning with health care practice experiences at the microsystem level.

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 5003C. Health Assessment for Advanced Practice (4). Prerequisite: Admission to the graduate program. This course provides the learner with a strong foundation in the health-assessment skills requisite to advanced nursing practice. The focus of the course is the diagnostic reasoning process as it relates to building a clinical database. History taking, physical examination skills, laboratory, as well as diagnostic and radiographic modalities are included in the course content. The course has a clinical component wherein the students utilize the diagnostic process in drawing conclusions based upon a clinical database and formed through various assessment modalities.

NGR 5064C. Advanced Skills for the Advanced Practice Nurse (2). Prerequisite: NGR 5003C. The 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 (3). Prerequisites: NGR 5003, 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 Pathophysiology (4). Prerequisites: BSC 2085, BSC 2085L, BSC 2086, and BSC 2086L. This course is designed to acquaint the nursing graduate student with the principles of pathophysiology appropriate to entry-level graduate work.

NGR 5172. Pharmacology for Advanced Practice (3). Prerequisite: Admission to the DNP 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 5250. Issues in Geriatrics Seminar (1). Prerequisites: NGR 5003C, NGR 5102, NGR 5737, NGR 5740, and NGR 5800. This course provides the student with current information and analysis of issues and trends relevant to the geriatric population. Topics are analyzed using a problem-based learning approach and focus on desired resolution of identified problematic issues through current research and associated publications.

NGR 5291. Advances and Trends in Adult Health Nursing (1). Prerequisite: NGR 5140. The focus of this course is on the identification and analysis of knowledge, trends, and issues pertinent to advances in adult health nursing. Topics include disease processes such as diabetes mellitus, oncology/end-of-life issues, pain management issues, hypertension, congestive heart failure, asthma/COPD, and stroke.

NGR 5305. Issues in Pediatrics Seminar (1). Prerequisites: NGR 5003C, NGR 5102, NGR 5737, NGR 5740, and NGR 5800. This course provides the student with current information related to issues that impact children today. A discussion format assists the student in learning more about those issues that have a significant effect on the child, the family and society. Current trends in health care and health care funding for issues that affect children are also discussed.

NGR 5341. Women's Health Seminar (1). Prerequisites: NGR 5003C, NGR 5102, NGR 5737, NGR 5740, and NGR 5800. This course affords the student the opportunity to explore and discuss current topics in women's health. The course encompasses clinical practice issues as well as the abundant research opportunities in the area of women's health.

NGR 5503. Advanced Practice Psychiatric Nursing Seminar (1). Prerequisites: NGR 5003C, NGR 5102, NGR 5737, NGR 5740, and NGR 5800. This course provides the student with information related to commonly-occurring psychiatric/mental health concerns of clients in their APN practice. Assessment, counseling strategies, medication management, family involvement and appropriate referral are discussed in relation to select acute and chronic psychiatric problems. A developmental approach is incorporated. Primary, secondary and tertiary levels of treatment by the APN are addressed.

NGR 5621. Community Health Seminar (1). Prerequisites: NGR 5003C, NGR 5102, NGR 5737, NGR 5740, and NGR 5800. This course provides students with an understanding of the role of the advanced practice nurse in the community health setting and the relationship between the practices of client and family and community health nursing. Additional focus is on strategies for bridging gaps in health care systems to improve the health care outcomes of diverse populations.

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 5713. Curriculum Development In Nursing Education (4). Prerequisite: Admission to the graduate program. This initial course in the Nursing-Educator sequence introduces the graduate nursing student to the theoretical foundations of nursing education and the relationship among these theories, curriculum development, and course design.

NGR 5714C. Instruction in Nursing Education: Design and Strategies (4). Prerequisite: NGR 5713C. 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 5713C, and NGR 5714C. This course focuses on educational program evaluation and change. The emphasis is on application of testing and measurement relevant to the health professions. The student learns effective test design and test writing skills. Methods of evaluating student performance in the classroom and clinical settings are also explored, and evaluation tools for educational programs, courses and students are discussed. The course addresses the change process in relation to educational outcomes and course evaluations.

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 5770. Clinical Leadership and Resources Management (3). Prerequisite: Instructor permission. This course examines leadership theories and evidence based management strategies for application in health care clinical microsystems and mesosystems. Content focuses on leadership styles, change theory, fiscal and human resource management, and performance improvement strategies to promote patient safety and enhance worker productivity and quality of patient care. Emphasis is placed on the student's professional development as a leader in transforming patient care delivery systems.

NGR 5772L. Clinical Leadership Practicum I (3). Prerequisites: NGR 6896 and 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). Prerequisites: NGR 5770 and NGR 5772L. This course continues student development of nursing leadership and decision-making skills in managing health care microsystems. Special emphasis is placed on planning and integrating evidence-based practice into patient care delivery systems to improve health care outcomes. Clinical guidelines and emergency preparedness strategies are examined.

NGR 5775L. Clinical Leadership Practicum III (4). Prerequisites: NGR 5770, NGR 5772L, and NGR 5773L. This course continues student development specific to the Clinical Nurse Leader role. This course involves clinical experiences at the microsystem level that encompass the clinical decision-making and care manager role during leadership experiences in a hospital based clinical setting. During this experience, the student focuses their efforts on clinical leadership, accountability for patient outcomes, the institution of evidence-based strategies, sound fiscal management, and the provision of client-centered care.

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 DNP program or instructor permission. This course incorporates SPSS and covers basic principles and applications of statistics to problems in clinical and public-health settings. Topics include descriptive statistics, probability, sampling, hypotheses testing, proportions, t-tests, chi-square tests, analysis of variance, correlation, linear regression and correlation coefficients, multiple regression, as well as nonparametric statistics. Students gain the ability to apply the steps of statistical inference, perform appropriate statistical tests, and interpret the results and computer output for commonly used statistical procedures. Analytic techniques to support evidence-based practice include NNT, Risk Ratio, Odds Ratio, and Relative Risk.

NGR 5852. Evidence-Based Practice Appraisal and Application (3). Prerequisites: two courses in specialty area, NGR 5602C, NGR 5714C, NGR 5718C, NGR 5800, and NGR 5846. This capstone course allows students to synthesize and integrate concepts developed in previous graduate courses, with emphasis on evidence-based practice of selected issues. The course culminates in the utilization of evidence-based methods for the development of a scholarly paper, with recommendations for improving practice.

NGR 5871. Managing Information and Technology in Health System (3). Prerequisites: Admission to the DNP 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 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 5910r. Supervised Research (1-3). Prerequisite: Instructor permission. Allows for research experience supervised by faculty that is different from student's thesis project. May be repeated to a maximum of five semester hours as agreed upon by faculty.

NGR 5930r. Special Topics in Nursing (1-3). Prerequisite: Instructor permission. Seminar topics may include advanced technique in critical care nursing, emphasis on special populations, emphasis on specific identified nursing phenomena. May be repeated as topics change to a maximum of nine semester hours.

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 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 (3). (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 (5). (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 6641. Assessment and Collaboration with Communities and Systems (2). Prerequisite: All core courses. This course challenges students to integrate techniques of community assessment and principles of collaboration in order to develop strategic, operational, or evaluation plans based on objective, comprehensive assessment. Topics include health-system concepts related to a broad spectrum of communities, with emphasis on the evaluation and use of data, collaborative work within health systems, and the examination of outcomes.

NGR 6673. Epidemiological Methods (3). Prerequisite: NGR 5846. This course introduces concepts and methods of epidemiology, with emphasis on studying disease disparity among vulnerable groups in society and on selecting culturally appropriate interventions to address these disparities. The course offers an overview and critique of study designs - such as cross sectional, case control, and intervention studies - and includes estimation of the burden of disease as well as evaluations of primary, secondary, and tertiary strategies of containment. Selected informatics skills include the selection, utilization, and critique of population-based health datasets.

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 6778L. Health Systems Leadership Practicum I (3). (S/U grade only.) Prerequisite: All HSL courses and all DNP core courses. This course strengthens the development of advanced executive and leadership skills in advanced-practice nursing, while emphasizing the assessment of individual strengths, leadership, and effective use of self within a clinical unit or workplace. Students access resources to broaden their skills within and outside their area of expertise and also apply setting-appropriate principles of quantum leadership, business, and operation skills. Case studies and field work highlight the impact of leadership for creating practice environments that recruit and retain talent, maximize productivity, and increase efficiency.

NGR 6779L. Health Systems Leadership Practicum II (5). (S/U grade only.) Prerequisite: NGR 6778L. This course involves supervised practice at a program level, designed to advance nursing practice and to strengthen setting-appropriate leadership, business, and operation skills. Students apply key leadership principles for creating strategy and managing a team at a program level. The course emphasizes competencies for quality improvement, organizational culture, interdisciplinary team care, patient-centered care, evidence-based practice, as well as resource management and utilization of informatics. Students apply rapid-cycle change theories and rapid-cycle innovation to enhance care excellence and efficiency and to optimize priority-initiative performance within an organization.

NGR 6853. Translation and Synthesis of Evidence (3). Prerequisite: 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 6896. Health Care and Organizational Change (3). Prerequisite: Admission to the graduate program or instructor permission. This course provides an examination of the U.S. health care system and its development within a historical context. Current issues in health systems leadership and organizational change are explored. Focus is on analysis and evaluation of concepts such as economic and societal/cultural forces in the health care industry, health disparities, political and governmental issues related to health care change, trends in reimbursement, regulatory changes, and advanced practice nursing roles related to system evolution.

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 I (3). Prerequisite: NGR 6935. Corequisite: NGR 6619L or NGR 6897L. This course enables students to evaluate and improve healthcare systems and clinical outcomes. With faculty guidance, students synthesize, integrate, and translate newly acquired knowledge and skills in the design and planning of a scholarly project. During this course, students complete any necessary institutional review requirements and select an appropriate design method. Project options may include the design and testing of a clinical pathway; the design and testing of an innovative intervention in patient care; or the development, testing, or evaluation of a program.

NGR 6912C. DNP Project II (3). Prerequisite: NGR 6910C. This course enables students to evaluate and improve patient outcomes. Using scientific theory, systematic evidence appraisal, policy and organizational analysis, as well as models of care delivery, students translate newly acquired knowledge and skills in the implementation and evaluation of a scholarly project. Project options may include the design and testing of a clinical pathway; the design and testing of an innovative intervention in patient care; or the development, testing, or evaluation of a program. The course culminates in the successful oral defense of a scholarly project and the development of a journal article suitable for publication.

NGR 6935. DNP Project Seminar (2). Corequisite: NGR 6619L or NGR 6897L. This course provides students with the opportunity to evaluate and improve healthcare systems and clinical outcomes. With faculty guidance, students synthesize, integrate, and translate newly acquired knowledge and skills in the design and planning of a scholarly project. During this course, students complete any necessary institutional review requirements and select an appropriate design and method. Project options may include: design and testing of a critical pathway; design and testing of an innovative intervention in patient care; and development, testing, or evaluation of a program.

NGR 6942Lr. DNP Residency I (1-5). (S/U grade only.) Prerequisite: All DNP core and specialty courses. This course provides an intensive clinical-residence 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 6943Lr. DNP Residency II (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 6947C. Teaching of Nursing Practicum (3). This course applies teaching/learning theory and methods in an educational setting. The student prepares, implements, and evaluates classroom and clinical instruction.

Department of NUTRITION, FOOD AND EXERCISE SCIENCES

COLLEGE OF HUMAN SCIENCES

Web Page: <http://www.chs.fsu.edu/nfes>

Chair and Professor: Bahram H. Arjmandi; **Professors:** Hsieh, Ilich-Ernst, Moffatt, Sathe; **Associate Professors:** Abood, Figueroa, Panton, Rankins; **Assistant Professors:** Kim, Ormsbee, Prado, Spicer; **Associates in Athletic Training:** Garber, Sehgal; **Research Associate:** Kasper; **DPD Director:** Farrell; **Assistant In (Instructor and Lab Manager):** Douglas; **Courtesy Faculty:** Daggy, Stowers; **Professors Emeriti:** Dorsey, Erdman, Harris, Haymes, Kassouny, 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. 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 and treatment of selected chronic disease states, as well as studies on the quality and safety of food.

Two master's programs are offered in the department: 1) Nutrition and Food Science with an emphasis in nutrition science, food science, clinical nutrition, sports nutrition, nutrition education and health promotion; 2) Exercise Science with concentrations in exercise physiology and sports sciences. Thesis and non-thesis options are available for the master's programs.

The department also has a dietetics internship program which, in conjunction with the master's degree in nutrition and food science, provides a post-baccalaureate route for 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.

At the doctoral level there are also two degree programs leading to a Doctor of Philosophy (PhD). The first degree program is in Human Sciences with concentration in either human nutrition or food science, and the other degree program is in Exercise Science with a concentration in exercise physiology. These doctoral programs are designed to enable students to achieve competency in a specialized area of nutrition, food science or exercise physiology and to become independent researchers with a possible career in academia, industry, government or other health-related fields.

Ongoing research in the department includes basic, applied and clinical studies linking exercise, nutrition, food and lifestyle modifications. Examples include:

1. Obesity-, bone-, cardiovascular-, functionality-related clinical studies
2. Age-associated investigations in areas of 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 and food allergies
5. Functional foods in health and disease

The department is developing a Center on Age-Related Disorders (CARD) that can fully explore the role of nutrients and exercise in combating chronic diseases and reducing age-associated declines.

Research Facilities

Our facility has a Sirrus clinical analyzer, which can employ multiple biochemical tests to measure multiple samples at one time; dual x-ray absorptiometry (iDXA) used for our bone mineral density (BMD) and body composition studies; an electrocardiography machine (ECG) for heart rhythms; and multiple-metabolic measurement machines 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.

There is a resistance training area equipped with MedXTM machines; these machines focus 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 BiodexTM isokinetic machine 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 and an environmental chamber that can be used to manipulate temperature, wind chill, and humidity. There are also two whole body vibration Powerplate machines.

The cardiovascular laboratory is 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 stiff-

ness); 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.

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.

The Food Chemistry laboratories are equipped with spectrophotometers, various electrophoresis systems, automated microplate reader and washer, freeze dryers, chromatographic systems, micro DSC, a water purification system, and food-analysis equipment.

The department has also added two certified Biological Safety Level 2 laboratories that are available for food safety experiments as well as biological specimens.

Scholarships and Fellowships

In addition to graduate teaching and research assistantships, students may apply for the Anne Marie Erdman Scholarship, which is awarded annually. Preference is to be given to international students. Minority applicants for the doctoral program should be aware that the area of nutrition and food science at Florida State University has been identified as a target discipline for the Patricia Roberts Harris Fellowship. The Wayne King Scholarship, the Lavina Laybold Scholarship, and the Pao-Sen Chi Memorial Scholarship are awarded annually. Additional funding from the College of Human Sciences is also available to all students.

Master of Science (MS) in Food and Nutrition

Areas of specialization include:

1. Food science
2. Nutrition science
3. Clinical nutrition
4. Sports nutrition
5. Nutrition education and health promotion

Thesis (thirty semester hours minimum) and non-thesis (thirty-six semester hours minimum) programs are both available. In addition to meeting University admission requirements, admission to the nutrition and food science graduate programs requires a GPA of 3.0 and minimum Graduate Record Examination (GRE) scores of 600 on the Quantitative Reasoning section and 450 on the Verbal Reasoning section, using the old scoring system. On the Revised GRE, applicants need a minimum of 145 on the Quantitative Reasoning section and a minimum of 150 on the Verbal Reasoning section. Students are expected to have background supporting courses in food and nutrition, general and organic chemistry, elementary biochemistry, metabolism, microbiology, and anatomy/physiology.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

For the dietetic internship, students must first be admitted to the master's program in nutrition and food science. In addition, the individual must submit verification that the Didactic Program in Dietetics requirements for the Academy of Nutrition and Dietetics have been met. A selection committee makes the final recommendation for acceptance into the program.

Courses which must be completed by each master's student in nutrition and food science are: DIE 5248, DIE 5935, FOS 5936, HUN 5242 or 5243, HUN 5802, HUN 6930, FOS/HUN 5930 (two semester hours minimum), HUN 5938, HSC 5603 statistics, and a course taken outside of the department at the graduate level and relevant to the area of specialization. Other courses are required depending upon the area of specialization. Thesis students must take HUN 5971 (six to nine semester hours) and are required to write a prospectus and a thesis. Non-thesis master's students must register for HUN 5906, Directed Individual Study (three to six semester hours), while working on a special project or practicum which has been approved by their major professor, advisory committee, department chair, and dean. The remainder of the program is based on the discretion of the committee and the student's area of professional interest. PET 6931r, Advanced Topics: Computer Applications (two semester hours), is recommended but not required. Analytical chemistry is desirable for some specializations.

Master of Science (MS) in Exercise Science

Students in Exercise Science are offered concentrations in exercise physiology or sports sciences.

Both thesis (thirty-six semester hours) and non-thesis (forty-five semester hours) programs are offered. Admission to the exercise physiology program requires a GPA of 3.0 and minimum scores of 600 on the Quantitative Reasoning section and 450 on the Verbal Reasoning section on the old GRE scoring system. On the Revised GRE, applicants need a minimum of 145 on the Quantitative Reasoning section and a minimum of 150 on the Verbal Reasoning section. Students are expected to have background supporting courses in human nutrition, general chemistry, anatomy/physiology, and exercise physiology.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Core courses required for a concentration in exercise physiology are: PET 5355C, PET 5553, PET 6930, HUN 5802, HUN/PET 5930 (two semester hours minimum), EDF 5400 or STA 5126, PET 5367, HUN 6940r; and two or three courses from the following: PET 5077, 5932, 6365, 6368, 6386, and 6317. For the thesis option, the student must also take HUN 5906 (three semester hours), HUN 5971 (six to nine semester hours), and an additional elective (three semester hours). For the non-thesis option, the remaining requirements include HUN 5906 (three semester hours), PET 8945r (nine semester hours), and additional electives (nine semester hours of internship).

Courses required for a concentration in sports sciences include: PET 5389, PET 5751, PET 5353, and PET 5412. Other required courses are FAD 5934, CHD 5915, PET 5355C, PET 5367, and an elective from departmental courses. For the thesis option, the student must take HUN 5971 and HUN 5930. The non-thesis course is PET 5945 for twelve hours.

Doctor of Philosophy (PhD) Programs

The Doctor of Philosophy in human sciences includes food science and human nutrition as areas of concentration, while the Doctor of Philosophy (PhD) in exercise science includes exercise physiology as an area of concentration.

In addition to meeting the University's requirements for graduate admission, admission to all doctoral programs requires a GPA of 3.0 and minimum scores of 600 on the Quantitative Reasoning section and 450 on the Verbal Reasoning section on the old GRE scoring system. On the Revised GRE, applicants need a minimum of 145 on the Quantitative Reasoning section and a minimum of 150 on the Verbal Reasoning 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. A master's bypass option is available.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

The PhD program in human sciences with areas of emphasis in nutrition and food sciences is a competency-based research degree; this degree has no total hour requirement; however, the student must advance to mastery in the field of specialization. An area of emphasis (nine to twelve semester hours) outside the Nutrition, Food and Exercise Sciences department is required. 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 human nutrition are: HOE 6938, FOS/HUN 6930r (must enroll each semester for one semester hour), HUN 6248/5938 (six semester hours minimum), and HUN 6940r (three semester hours). The research tool requirement for both areas of concentration must be met by including in the program of studies not less than six semester hours of coursework in statistics or specialized methods.

Admission to candidacy is dependent upon passage of the preliminary examination. After passing the preliminary examination, the student may then enroll in HUN 6980r, Dissertation (twenty-four semester hours).

At the dissertation defense, students must submit a draft of a manuscript for publication pertaining to their dissertation.

Specific course requirements for PhD in exercise science with a concentration in exercise physiology are PET 6365, PET 6368, PET 6386, PET 5367, PET 6930r, PET 6931 (one semester hour per semester enrolled), HUN 6906 (three semester hours), HUN 6911r (S/U), HOE 6938, EDF 5401, EDF 5402, BMS 6511, HUN 6940r (three semester hours), and selected electives (nine semester hours minimum).

The research tool requirement, preliminary examination, and manuscript expectation are the same as previously discussed for the PhD in human sciences with a concentration in human nutrition and food sciences or the PhD in exercise science.

Definition of Prefixes

DIE—Dietetics
FOS—Food Science
FSS—Food Service Systems
HSC—Health Sciences
HUN—Human Nutrition
PET—Physical Education Theory

Advanced Undergraduate Courses

DIE 4244. Medical Nutrition Therapy (3). Prerequisites: HUN 3224; BSC 3086 or PET 3301C; and BCH 3023. Corequisite: HUN 3225. Metabolism in disease and the adaptation of diet in the treatment or prevention of disease.

DIE 4244L. Nutrition in Disease Laboratory (1). Prerequisites: BCH 3023C, BSC 2085, HUN 3224, HUN 4296, PET 3322, and PET 3322L. Corequisites: DIE 4244 and HUN 3226. Application of the principles and concepts of nutrition therapy to meet nutrient, medical, social, and psychological needs of patients.

DIE 4315. Community Nutrition (3). Prerequisites: DIE 3003 and HUN 1201. The planning, implementation, and evaluation of nutrition programs in the community and public nutrition policy formulation.

FOS 4114C. Food Science (4). Prerequisites: CHM 2200C, FOS 3026, and FOS 3026L. Chemistry of basic raw foods and their behavior during processing. Assessment of food quality. Lecture and laboratory.

FOS 4209. Food Safety and Quality (3). Prerequisites: HUN 1201 and FOS 3026 or departmental approval. Topics include food spoilage, food poisoning, food-borne pathogens, food laws and regulations, HACCP and safe food-handler practices, with emphasis on current issues related to the safety and quality of food.

FSS 4139. Institutional Food Economics (3). Prerequisites: DIE 3003 and ECO 2000 or ECO 2013. Wholesale market functions and purchase of food for institutional use.

FSS 4315. Institutional Organization and Administration (3). Prerequisite: DIE 3003. Managerial concepts and administration concerns involved with institutional food production.

FSS 4315L. Institutional Organization and Administration Laboratory (3). Prerequisites or Corequisites: FOS 3022L, FSS 4315, and instructor permission. Application of management concepts to institutional food administration.

FSS 4451. Institution Plant Layout and Equipment (3). Layouts, materials, construction, specifications, and maintenance of equipment, furniture, and furnishings for institution food units.

HUN 4412. Developmental Nutrition (3). Prerequisite: HUN 1201. Nutrition during pregnancy, lactation, and growth. Effects of nutrition on mother and child. Interrelationships of diet, nutrition, emotional development, behavior, and stress. For non-majors.

PET 4076. 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 4551C. Exercise Testing and Prescription (3). Prerequisite: PET 3380C. This course is designed to examine techniques of evaluation for physical fitness and health with a particular emphasis on aerobic capacity, flexibility, strength, and body composition and to design, implement, and administer programs for developing physical fitness and lifestyle changes.

Graduate Courses

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. Food Science Seminar (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. Food Science Seminar (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 (1-3). (S/U grade only.) May be repeated to a maximum of six 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). Readings and discussion in special areas such as nutrition in aging, energy metabolism and obesity, and world food problems. May be repeated to a maximum of six semester hours.

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 (1-6). (S/U grade only.) May be repeated to a maximum of six 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 5052. Motor Memory (3). Deals with behavioral theories, models, and related research on motor memory. Analyses made of the research evidence related to encoding, capacity, forgetting, storage mechanisms, control processes, organization, and error scores. Offered alternate years.

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 5355C. Advanced Exercise Physiology (3). Physiological effects of acute and chronic physical exercise.

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. Cardio-respiratory and Anthropometric Evaluation and Development of Exercise Programs (3). Prerequisite: PET 5355C. 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's 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: PET 3380C 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 Cardio-respiratory 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: PET 5355C 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 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.

PET 8945r. Exercise Physiology Internship (1-9). (S/U grade only.) Prerequisites: PET 5355C, PET 5553, and instructor permission. 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.

OCEANOGRAPHY: see Earth, Ocean, and Atmospheric Sciences

Department of PHILOSOPHY

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.philosophy.fsu.edu/>

Chair: J. Piers Rawling; Professors: Bishop, Clarke, Fleming, McNaughton, Mele, Rawling, Ruse; Associate Professors: Morales, Roberts; Assistant Professors: Justus, Kearns, Stein

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 philosophy of biology.

Fellowships and assistantships are available for the support of thirty to thirty-five 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 five 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. A total score of 1100 or more (verbal plus quantitative) on the Graduate Record Examination (GRE);

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

3. Minimum grade point average (GPA) of 3.0 in the last two years of undergraduate study.

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 their preliminary exams and other requirements necessary to be admitted to candidacy for the PhD, 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 5555 Core Course in Metaphysics and Epistemology (3)

PHI 5665 Core Course in Ethics (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 5555 and 5665 with a grade of "B" or better.

Students must also pass PHI5135 with a grade of "B-" or better.

Master's students must complete at least thirty three semester hours. The MA degree is awarded upon either the successful oral defense of an original thesis or completion of the MA exam.

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.

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 are 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 meta-ethics, 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 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 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 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 6455r. 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.

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.

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 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 5971r. Thesis (1-6). (S/U grade only.) A minimum of six semester hours is required.

PHI 6980r. Dissertation (1-12). (S/U grade only.)

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

Department of PHYSICS

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.physics.fsu.edu/>

Chair: Mark A. Riley; **Associate Chair:** Horst Wahl; **Professors:** Berg, Blessing, Boebinger, Bonesteel, Brooks, Capstick, Cao, Cottle, Dobrosavljevic, Duke, Eugenio, Gorkov, Hill, Kemper, Manousakis, Owens, Piekarewicz, Prosper, Reina, Rikvold, Roberts, Schlottmann, Tabor, Van Winkle, von Molnar, Xiong, Yang, Zhou; **Associate Professors:** Adams, Chiorescu, Crede, Hoeflich, Lind, Ng, Shaheen, Rogachev, Volya, Wiedenhoefer; **Assistant Professors:** Askew, Gerardy, Okui, Vafek, Warusawithana; **Professors Emeriti:** Albright, Desloge, Edwards, Fletcher, Hagopian, Kimel, Kromhout, G. Moulton, W. Moulton, Philpott, Plendl, Robson, Sheline, Skofronick, Testardi

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 acquisitions, 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 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 is about twenty-five pages in length and contains all the 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, B; and PHY 5645 and PHY 5646, Quantum Mechanics A, 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 5745, 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://www.physics.fsu.edu/grads/guide.html>, 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 with a grade of “B” or better.

Qualifying Examination. This examination is the written examination that all student must pass within the first two years to be able to continue toward the PhD degree.

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.

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).

For both thesis and non-thesis degrees, at least nine semester hours must be earned in the core courses PHY 5246, 5346, 5347, 5524, 5645 and 5646, including at least one course in quantum mechanics. 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

A 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 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 *Physics Graduate Studies Guide*.

Definition of Prefixes

AST—Astronomy

PHY—Physics

PHZ—Physics: Specialized

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 5219. 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 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 5157. Advanced Numerical Applications in Physics (3). Prerequisites: PHY 4151C, 4604. Course consists of an introduction to a variety of numerical techniques for the solution of differential equations (D.E.) as well as an exploration of some of the power behind Monte Carlo (M.C.) methods.

PHY 5226. Intermediate Mechanics (3). The principles and applications of the Newtonian mechanics of particles and systems of particles. Non-inertial reference frames, simple and damped harmonic motion, central force motion, and the motion of a rigid body in a plane.

PHY 5227. Advanced Mechanics (3). Prerequisites: PHY 3221 or 5226 or its equivalent. Kinematics and dynamics of rigid bodies. An introduction to Lagrangian and Hamiltonian mechanics. The dynamics of oscillating systems.

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 or 5227. 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 5645 and 5646, 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 8966r. Master's Comprehensive 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 5430. Physics of Materials (3). Prerequisite: PHZ 5491. An important part of the toolkit of a practicing condensed matter physicist is a knowledge of the historical experimental data base. This course presents part of this data base through a study of the corporate record of the Bell Laboratories, with supplemental material bringing the research record up to date.

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.

PHZ 5716. Biophysics II (3). Prerequisite: PHZ 5715. Selected topics in modern molecular biophysics, modeling and simulations of macromolecules, molecules as classical systems, molecular dynamics simulations, free energy calculations, molecular mechanics/quantum mechanics methods.

PHYSIOLOGY:
see Biological Science; Medicine

Department of POLITICAL SCIENCE

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://polisci.fsu.edu/>

Chair: Dale L. Smith; **Professors:** Barrilleaux, W. Berry, Crew, Jackson, Moore, Scholz, Smith, C. Weissert, W. Weissert; **Associate Professors:** Barabas, Claggett, Ehrlich, Gomez, Jerit, Maestas, Reenock, Souva; **Assistant Professors:** Beazer, Coleman, Driscoll, Grosser, Ryan, Shannon, Siegel; **Instructor:** Wiebelhaus-Brahm; **Professors Emeriti:** Abcarian, Atkins, Bone, Dye, Flanagan, Flory, Glick, Gray, Palmer, Roady, St. Angelo, Vanderoef; **Affiliated Faculty:** F. Berry, Falaschetti, Feock, Metcalf

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. Scores for examinations taken under the old GRE scoring format will be considered using comparable standards. 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 master's 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 guarantee acceptance. All materials must reach the department by January fifteenth to guarantee consideration for departmental assistantship awards.

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. Scores for examinations taken under the old GRE scoring format will be considered using comparable standards. 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. In circumstances where more application 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.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Placement

Most students in the doctoral program expect to pursue a career as part of a university faculty, and 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 stu-

dents who plan to complete their PhD in the department. The strongest applicants 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.

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-seven semester hour, non-thesis program, including twenty-four semester hours of coursework, a twelve semester-hour internship or practicum, and a one semester-hour program planning course. Twelve of the twenty-four semester hours are in required courses; the remaining twelve semester hours are chosen from a list of approved electives.

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.

Coursework requirements typically add up to fifty-four semester hours: twenty-four total semester hours in two major fields; eighteen semester hours in required methods and research courses; and twelve semester hours of electives.

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 Spring semester of their third 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 an oral examination conducted by the dissertation committee. 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.

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.

CPO 6910. Advanced Research in Comparative Politics (3). Prerequisite: POS 5746. Students discuss strategies for research in comparative politics and design and implement a research project relating to the specific topic of the course. Specific topic varies.

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 5014. Contexts and International Relations (3). This course considers the impact geographic and historic factors exert on the events and phenomena related to international relations. It looks at the many ways that such contextual forces may influence national and international processes.

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 5137. Politics of Terror (3). This course explores terror and foreign policy with particular emphasis on U.S. foreign policy since September 11, 2001.

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.

INR 6910. Advanced Research in International Relations (3). Prerequisite: POS 5746 or instructor permission. Discusses strategies for research in international relations. Students will design and submit a research project relating to the specific topic of the course.

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 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 5287. Seminar in American Government and Public Policy: Judicial Politics (3). Emphasis is on courts as political institutions. Analysis covers the behavior of courts from the U.S. Supreme Court to local small claims courts and the links between courts and society. Topics include court organization, judicial administration and court reform, politics of judicial selection, settlement of civil and criminal cases, plea bargaining, judicial decision making, judicial policy, and the implementation of judicial policy.

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.

POS 6910. Advanced Research in American Government (3). Prerequisite: POS 5746. Students discuss strategies for research in American government and design and implement a research project relating to the specific topic of the course. Specific topic varies.

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. Acquaints students with multivariate statistical techniques emphasizing regression analysis. Students are expected to apply these techniques to a research problem of their own selection. 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. Focuses on a variety of advanced techniques for quantitative political science research, including recursive and non-recursive structural equation models, factor analysis and covariance structure models, and methods for time-series analysis. May be repeated to a maximum of six semester hours.

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 5607. Politics of Health Policy (3). 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.

PUP 6910. Advanced Research in Public Policy (3). Prerequisite: POS 5746 or instructor permission. Students will discuss strategies for research in public policy and design, and will submit a research project relating to the specific topic of the course.

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 adviser.

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 (3–6). (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 5085. Governmental Relations for Business (3). This course focuses on the activities employed by corporations pertaining to public affairs or governmental relations. The objective of the course is to provide students with a practical understanding of this component of business and how this function is developed, managed, and evaluated.

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 5905. Applied Program Planning (1). (S/U grade only.) In consultation with the program director, the student creates a coursework and internship/practicum plan for the major in applied American politics and policy.

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

Department of PSYCHOLOGY

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.psy.fsu.edu>

Chair: Janet A. Kistner; **Associate Chair:** Berler; **Professors:** Baumeister, Carbonell, Charness, Contreras, Ericsson, Hull, Hyson, Johnson, Joiner, Keel, Kistner, Lonigan, Patrick, Schatschneider, Schmidt, Spector, Tice, Wagner, Wang; **Associate Professors:** Bernat, Bolanos, Connor, Eckel, Kaschak, Kelley, B. Licht, M. Licht, Maner, McNulty, Plant, Taylor; **Assistant Professors:** Boot, Cogle, Ehrlinger, Rodefer, Williams; **Research Associates in Psychology:** Berler, Murphy, Sachs-Ericsson; **Associates in Psychology:** Kline, Lane; **Assistant in Psychology:** Polick; **Affiliated Faculty:** Bennett Johnson, Cappendijk, Davis, Driscoll, Ferris, Gerend, Glueckauf, Kabbaj, Ouimet, Phillips, Reyes, Roehrig, VanLandingham, Wetherby, Tenenbaum; **Visiting, Courtesy, and Adjunct Instructors:** Kerr, Lyons Johnson, Sullivan, Wells Harrison; **Professors Emeriti:** Bailey, Berkley, Brigham, Hokanson, Kennedy, 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 funding on an annual basis currently approximates \$6,000,000.

Information about the Department of Psychology, its graduate programs and faculty is available on the World Wide Web: <http://www.psy.fsu.edu>.

Facilities

The Psychology Department moved into its new, 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, for 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 newly established 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, cognitive aging, 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. Drs. Ericsson and Charness study 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. Dr. Boot uses a combination of psychophysical and eye-tracking measures to study how we make sense of the visual world 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. Drs. Charness and Boot conduct research to understand these changes, and to develop novel ways of using technology to buffer individuals against the natural effects of aging in the nervous system.

How do we understand language? The comprehension of language is the keystone against which human experience is built. Dr. Kaschak 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.

How do we learn to read? The development of literacy skills is critical to one's ability to succeed in academic and employment settings. Drs. Wagner and Schatschneider conduct research 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. Dr. Kelley researches 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. Dr. Ericsson studies 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. Barbara Foorman. 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 psychology and the law, prejudice and stereotyping, 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 & 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 in interracial 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. **Evolutionary Psychology:** Specific research includes examination of evolved social cognition in areas such as romantic attraction and long-term relationships, power and dominance, social affiliation and rejection, prosocial/altruistic behavior, and prejudice; evolutionary approaches to human emotion and motivation; hormonal processes involved in social behavior. **Health:** Specific research includes social processes in physical health (cancer prevention, healthy eating and physical activity, smoking cessation) and mental health (anxiety, depression, etc.); health communication; determinants of health protective or health-damaging behavior; judgment and decision making in the health context.

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 sensory processes, neural plasticity and development, energy balance and metabolism, neuroendocrinology and behavior, and cellular/molecular neuroscience. 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://www.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 contact the department 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 *Guidelines for the Operation of the Doctoral Programs*.

Pre-Doctoral Program

Core Curriculum

Students complete one advanced statistics course. In addition, a basic statistics course is required if the student has not previously taken an introductory statistics course.

Research Apprenticeship

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 typically evolves into a master's thesis during the second year.

Empirical Master's Thesis

The student's supervisory committee decides whether the student must complete an empirical thesis and obtain a master's degree.

Note: Most program areas require completion of the master's degree prior to entry to the doctoral program.

Doctoral Program

With the approval of the pre-doctoral supervisory committee, students formally enter the doctoral program. Students with master's degrees from other institutions enter the doctoral program after they have completed the departmental core curriculum, 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 after students are admitted to the doctoral program:

- Two of the following core courses: DEP 5165; EXP 5406, 5508; PPE 5055; PSB 5056, 5341, or PCB 5845; PSB 6059 (Behavioral Endocrinology); SOP 5069; and PSY 6919 (Cross-Area Seminar)
- Completion of the preliminary doctoral-examination requirements for the program area
- A dissertation research project

Dissertation Defense Guidelines

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 of treatise or dissertation requires at least a majority approval of the committee.

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. Program requirements are reviewed periodically by the faculty and may change.

Clinical Psychology Program

Clinical psychology students are required to obtain a master's degree. In addition, the clinical program requires students to complete an independent project which may take a variety of forms (e.g., a grant proposal) and is evaluated as part of the preliminary doctoral examination.

The following courses, clinical practica, and one-year internship meet the requirements for graduate education in clinical psychology established by the American Psychological Association.

- Breadth of Scientific Psychology.**
 - Biological Aspects of Behavior: PSB 5056
 - Cognitive and Affective Aspects of Behavior: CLP 5196, CLP 5624 and EXP 5406 or EXP 5508
 - Social Aspects of Behavior: SOP 5069
 - History and Systems of Psychology: PSY 5605
 - Psychological Measurement: PSY 5325, CLP 6169, CLP 5624
 - Research Methodology: CLP 5375
 - Techniques of Data Analysis: PSY 6919 (Design and Analysis I), PSY 6919 (Design and Analysis II)
- Substantive Areas of Professional Psychology.**
 - Individual Differences: SOP 5069, PSY 5325, CLP 6169
 - Human Development: CLP 5475, CLP 6169, PSY 5325
 - Dysfunctional Behavior: Psychopathology, CLP 5475, CLP 6169
 - Assessment and Diagnosis: PSY 5325, CLP 5624, CLP 5375, CLP 5941

- e. Effective Intervention: CLP 5196, CLP 5624, CLP 5941
 - f. Consultation and Supervision: CLP 5941, CLP 5942
 - g. Professional Standards and Ethics: CLP 5624, CLP 5941, CLP 6920
3. **Advanced Seminars.** At least two advanced seminars or courses are required beyond those listed above.
 4. **Clinical Practicum.** CLP 5941/5942. A minimum of 550 hours are completed in the Psychology Clinic over a two year period beginning in the student's second year in the program. Students also have the opportunity to gain additional supervised applied experience in community agencies.
 5. **Internship.** PSY 6948. Students must complete a one-year pre-doctoral internship at an APA accredited site.

Cognitive Psychology Program

1. **Psychology Content Core.** EXP 5508; one of the following courses: DEP 5165, EXP 5406, PPE 5055, SOP 5053, PSB 6059 (behavioral endocrinology), SOP 5069, PSY 6919 Seminar in Current Research Topics (the required topic is Cross-Area Seminar), PSB 5056, PSB 5341 or PCB 5845; EXP 6920; and eight advanced course-units. As discussed in the Cognitive Area guidelines, these may be either full semester seminars (two course units each) or half-semester modules (one course-unit each). Other courses used to satisfy this requirement (e.g., courses offered by other departments) must have the approval of the student's major professor and committee.
2. **Research/Experiential Core.** Master's thesis (PSY 5973r); PSY 5917r; PSY 6656r; PSY 6980r
3. **Statistics/Methodology Core.** Students select three statistics courses from a list of designated courses.

Developmental Psychology Program

1. **Psychology Content Core.** DEP 5165; one of the following courses: EXP 5406, EXP 5508, PPE 5055, SOP 5069, PSB 6059 (behavioral endocrinology), PSY 6919 Seminar in Current Research Topics (the required topic is Cross-Area Seminar) PSB 5056, PSB 5341, or PCB 5845; and four advanced courses other than those listed previously as part of the content core
2. **Research/Experiential Core.** Master's thesis (PSY 5973r); PSY 5917r; PSY 6656r; PSY 6980r
3. **Statistics/Methodology Core.** Students select three statistics courses from a list of designated courses.

Social Psychology Program

1. **Psychology Content Core.** SOP 5069; one of the following courses: DEP 5165, EXP 5406, EXP 5508, PPE 5055, PSB 6059 (behavioral endocrinology), PSY 6919 (cross-area seminar), PSB 5056, PSB 5341, or PCB 5845; SOP 6920; and four advanced courses other than those listed previously as part of the content core
2. **Research/Experiential Core.** Master's thesis (PSY 5973r); PSY 5917r; PSY 6656r; PSY 6980r
3. **Statistics/Methodology Core.** Students select three statistics courses from a list of designated courses.

Interdisciplinary Program in Neuroscience

1. **Required Courses.** PCB 5845; PSB 5341; PSB 5057; PSB 5077; PSY 5908r (2 sections); PSB 6070r; PSB 6920r; PSB 6933r;
2. **Core Electives.** One course from a Physiology Cluster of designated courses and one course from a Behavioral Cluster of designated courses;
3. **Research Presentations.** At least two formal research presentations in addition to the dissertation defense;
4. **Teaching.** Two semesters of teaching experience.

Master's Degree in Psychology with a Specialty in Applied Behavior Analysis (Panama City Campus)

The Department of Psychology offers a separate Master of Science (MS) degree with a specialty 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, 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. The courses include: EAB 5700, 5701, 5710, 5711, 5721, 5780, 5796, 5940, 5941, 5942, 6130; PSB 5056; DEP 5165. This program may be completed in five or six semesters.

Applicants must satisfy all admission requirements and policies set by the University and the Department of Psychology, including a minimum GPA of 3.0 and a minimum score of 1000 on the combined verbal and quantitative portions of the aptitude test of the GRE. A baccalaureate degree is required; a major in psychology is desirable but not required. Applicants must have completed at least twelve semester hours of undergraduate and/or graduate courses in psychology prior to admission. Prerequisite courses are research methods, conditioning and learning, and applied behavior analysis. Prerequisite courses must have been passed with a grade of "B-" or better prior to matriculation into the program. Experience applying the principles of applied behavior analysis in a real-world setting is desirable.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Applicants must submit the following to be considered for admission to the master's program at Panama City:

1. Completed university and departmental application forms;
2. Official GRE scores;
3. Three letters of reference (a minimum of two should be from former professors);
4. A personal statement;
5. Official transcripts of previous undergraduate and graduate coursework;
6. Curriculum Vitae.

The application deadline is February 1st for Fall admission (the deadline should be confirmed with the department as it is subject to change.)

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

Definition of Prefixes

CLP—Clinical Psychology

DEP—Developmental Psychology

EAB—Experimental Analysis of Behavior

EXP—Experimental Psychology

PCB—Process Biology

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 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 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 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-four semester hours.

CLP 5942r. Clinical Practicum: Psychological Evaluation (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 client contact, supervision, and staffing. 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 6349r. Seminar in Clinical Theory (3). Prerequisite: Instructor permission. This seminar discusses traditional and contemporary approaches. May be repeated to a maximum of nine semester hours.

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 six semester hours.

CLP 6944r. Clinical Practicum: Change of Behavior (1-3). (S/U grade only.) Prerequisites: PSY 5325 and CLP 6169. This course is a practicum in psychotherapy and behavior change techniques. May be repeated to a maximum of thirty-six semester hours. A maximum of six semester hours credits may be taken in the same semester.

CLP 6947r. Clinical Practicum: Change of Behavior (1-3). (S/U grade only.) Prerequisites: PSY 5325 and CLP 6169. This course is a practicum in psychotherapy and behavior change techniques. May be repeated to a maximum of thirty-six semester hours. A maximum of six semester hours credits may be taken in the same semester.

PSY 5325. Assessment I (3). Prerequisites: CLP 6169 and instructor permission. This course studies theory and techniques in construction, use, and evaluation of psychological assessment procedures.

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 six 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.

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 neurophysiological approaches to behavior.

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 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 5347. Neuropharmacology (3). Prerequisite: PCB 5845. 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 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 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.

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 twelve semester hours.

Multiple Area Courses

PSY 5908r. Directed Individual Study (1-3). (S/U grade only.) This course consists of supervised individual study project on selected topic. May be repeated to a maximum of twenty-four 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. Seminar style. May be repeated to a maximum of nine 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 twelve 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 nine 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

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://askew.fsu.edu/>

Director: William Earle Klay; **Professors:** Askew, Berry, Bowman, Bradley, deHaven-Smith, Feiock, Klay, Reid; **Associate Professors:** Brower, Eger, K. Lee, Yang; **Assistant Professor:** Matkin; **Professor of Practice and Senior Executive in Residence:** R. Lee; **Visiting Professors and Adjunct Faculty:** Crispo, Dilling, Gleason, Heffron-Casserleigh, Jin, Long, Moore, Murdaugh, Otte, Parry, N. Smith, Stansbury, Tipton, Vanlandingham, Williams; **Professors Emeriti:** Chackerian, Grizzle, Sherwood, Waldby

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.

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 degrees 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, human resource management, emergency management, health services administration, and local government management are also available. Additional information (such as handbooks and syllabi) is available on the Askew School's Web site: <http://askew.fsu.edu/>.

Combined BA or BS and Master of Public Administration (MPA) Degree Program

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 program 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, completion of the MPA degree requires completion of forty-five graduate credit hours following receipt of a bachelor's degree. Students in the combined degree program 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 coordinator. 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.

For more information, refer to the Askew School's Web site at <http://askew.fsu.edu/>.

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 and on weekends.

A candidate may be admitted to the program by meeting University requirements for graduate study and by submitting three letters of recommendation, a career goal statement, a resumé 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. 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-two semester hours. Those students with less than one year of acceptable professional experience will be required to complete an additional three semester hours of internship. Included in the requirements are four substantive core courses, two methods courses, an action report on a significant administrative problem, and elective coursework arranged in consultation with a faculty adviser.

MPA Core Course Requirements

- Substantive Core Courses** (twelve 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
- Leadership and strategic management
- Human resource management
- Public budgeting and financial management
- Public information management
- Policy analysis and evaluation management
- Health services administration and policy
- Emergency management
- Not-for-profit management

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. Continuous registration is not required. All graduate certificates require a 3.0 grade point average.

The certificates are also available to MPA students who wish to pursue a specialization in financial management, human resource management, or health services administration as a part of their degree coursework.

Certificate in Emergency Management

The graduate Certificate in Emergency Management includes a variety of skill and knowledge concentrations appropriate for practicing managers and others interested in the field. 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.

Required Courses

- PAD 5335 Strategic Leadership for Communities (3)
- PAD 5397 Foundations of Emergency Management (3)
- PAD 5398 Emergency Management Programs, Planning and Policy (3)

Elective Courses

- GEO 5345 Disaster Preparedness and Hazards Mitigation (3)
- GLY 5885 Geologic Hazards Assessment (3)
- URP 5422 Coastal Planning (3)
- PAD 5352 Environmental Policy and Management (3)
- PAD 5376 Introduction to Terrorism: Preparedness and Response (3)

- PAD 5377 Advanced Topics in Terrorism (3)
- PAD 5378 Disaster Systems (3)
- PAD 5935r Seminar in Public Administration: Selected Topics (1-3) [Contingency Planning (3)]

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 three required courses and three additional courses selected from a list of courses offered through the Reubin O'D. Askew School of Public Administration and Policy, the Department of Accounting, the Department of Economics, and the Department of Urban and Regional Planning.

Required Courses

- PAD 5227 Managing Public Financial Resources (3)
- PAD 6207 Financial Resources Administration (3)
- PAD 6226 Public Budgeting Simulation and Issues (3)

Elective Courses

- ACG 5505 Government and Not-for-Profit Accounting and Auditing (3)
- PAD 5041 Public Service Ethics (3)
- PAD 5327 Public Program Evaluation (3)
- PAD 5935r Seminar in Public Administration: Selected Topics (1-3) [Public Finance (3)]
- PAD 6721 Policy Analysis Research Seminar (3)
- URP 5257 Fiscal Impact Analysis (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, 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.

Required Courses

- PAD 5826 Intergovernmental Management and Relations (3)
- PAD 5935r Seminar in Public Administration: Selected Topics (1-3) [Local Government Administration (3)]
- PAD 6136 Seminar in Management Studies in Government (3)
- PAD 6300 Governmental Administration in Florida (3)

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 seeking students in a simplified process which does not require formal admission to graduate studies. Up to twelve hours of credit earned in this program may later be applied to the MPA upon admission to that program.

The certificate requires eighteen semester hours (six courses) of graduate course credit in public administration. Three courses must be from the MPA substantive core and the remainder from electives and other courses in public administration. One course from a related field outside the school may be applied to satisfy certificate requirements.

Certificate in Health Services Administration and Policy

A certificate program in the area of health policy and administration is available. Consisting of the two core courses identified below, plus three electives, this program is designed to provide knowledge and skills required for present and continuing work in health services administration.

Required Courses for Certificate in Health Services Administration and Policy

- PAD 5846r Health Policy and Public Administration (3)
- PAD 5935r Seminar in Public Administration: Selected Topics (1-3) [Health Care Finance (3)]

Elective Courses

- ECP 5536 Economics in Health (3)
 HSC 5216 Environmental Health (3)
 HSC 5603 Models of Health Behavior (3)
 PAD 5935r Seminar in Public Administration: Selected Topics (1-3) [Health Policy Research (3)]
 SOW 5334 Organization and Community System Change (3)
 SOW 5603 Social Work in Health Settings (3)
 SYO 5405 Health Institutions and Social Policy (3)

Certificate in Human Resource Management

The Reubin O'D. Askew School of Public Administration and Policy graduate certificate in human resource management is for professionals and graduate students seeking to enhance their skills, knowledge, and ability in managing human resources.

Eighteen semester hours (six courses) are required to obtain the certificate. In order to obtain the certificate, three required and three elective courses drawn from the curriculum below must be completed.

Required Courses

- PAD 5417 Human Resource Management (3)
 PAD 5419 Issues in Human Resource Management (3)
 PAD 5427 Public Labor Relations (3)

Elective Courses

- ADE 5083 Human Resource Development (3)
 ADE 5385 Adult Learning (3)
 PAD 5041 Public Service Ethics (3)
 PAD 5327 Public Program Evaluation (3)
 PAD 5457 Quality Management Systems (3)
 PAD 5605 Administrative Law (3)
 PAD 6107 Seminar: Public Organizational Development (3)
 PAD 6418 Seminar: Human Resource Management (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) Graduate Record Examinations (GRE) score of 1100 or above (combined verbal and quantitative); 2) 3.0 or better overall undergraduate grade point average; and 3) 3.5 or better graduate grade point average.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Higher attainment on one measure may offset lower attainment on another. Professional experience will be considered, but academic performance will receive primary emphasis. Letters of recommendation are required. All applicants are required to take the GRE.

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:

MPA Substantive Core, Methodological Core, and Administrative Law

Twenty-four semester hours. Administrative law may be satisfied by work at either the graduate or undergraduate level. Courses in the MPA core may be satisfied by graduate work at Florida State University or at another recognized university.

PhD Core

Twenty-four semester hours of the following:

Substantive Courses

Twelve semester hours:

- PAD 6025 Theoretical Perspectives in Public Policy (3)
 PAD 6050 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

Eighteen semester hours specializing in one of the following fields of public administration:

1. Public Management
2. Public Policy
3. Institutions and Governance

Political Processes

Three semester hours, subject to waiver by PhD director.

Professional Topics

Zero semester hours, S/U grade only.

This is a proseminar that is required each semester until the student has obtained candidacy for the degree.

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 an oral defense of a publishable paper, which 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 from the school.

Definition of Prefix

PAD—Public Administration

Graduate Courses

PAD 5035. Policy Development and Administration (3). Prerequisites: PAD 5700, 5701, and 5050, or equivalents. This course seeks to enhance the student's ability to analyze, research, and develop public policies.

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). An overview of the intellectual heritage of public administration and its central issues. The student will learn key managerial skills and major sources of information for professional research.

PAD 5106. Public Organizations (3). Elements of micro and macro organizational analysis. Includes organization theory, structure and design, power and conflict, motivation, leadership, group behavior, organizational effectiveness, and development.

PAD 5227. Managing Public Financial Resources (3). Public budgeting and related financial management processes at the federal, state, and local levels with some emphasis upon those in Florida. The evolution of budgeting in the U.S. and major financial functions including an introduction to governmental accounting.

PAD 5275. Political Economy of Public Administration (3). Prerequisites: PAD 5700, 5701 or equivalents. Application of economic analysis to public bureaucracy and comparison of public and private management. Topics include public and private sector organizations, economic development, privatization, and public entrepreneurship.

PAD 5327. Public Program Evaluation (3). Prerequisites: PAD 5700 and 5701, or equivalents. Introduction to problems of public program evaluation methods and strategies for administrative implementation.

PAD 5335. Strategic Leadership for Communities (3). This course will teach the principles and skills of strategically managing agencies and communities. Strategic planning, community visioning, and organizational assessments will be covered. Managerial leadership roles and responsibilities in organizing community planning and change also will be covered.

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 5377. 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.

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 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). Survey of philosophy, approaches, and systems of managing people in government. Includes historical developments, personnel management practices and behaviors, and current issues. Examines recruitment, classification, compensation training, evaluation functions, and equal employment opportunity and labor management policies.

PAD 5419. Issues in Human Resource Management (3). Prerequisite: PAD 5417 or equivalent. Contemporary and enduring issues in field, and techniques on how to deal with them, are examined. Illustrative topics include AIDS, dissent, workforce quality, drug testing, child/elder care, video display terminals, smoking, self-managing teams, white collar crime, wellness programs, compensation, sexual harassment at the workplace.

PAD 5427. Public Labor Relations (3). Institutional theory and behavior in government labor relations. Public policy implications, differences from the private sector, evolution of public unions, scope and practices with emphasis upon Florida.

PAD 5457. Quality Management Systems (3). This course addresses the theory, design, and implementation of quality management systems in public organizations compared to those in other sectors of the economy. It examines the need for, and origins of, quality management philosophies, techniques, transition strategies, case studies and additional scenarios.

PAD 5605. Administrative Law (3). Legal ideas and frameworks conditioning the administrator, liability, disclosing information, rulemaking, policy change, discretion, investigation, and adjudication. Model State Administrative Procedure Act.

PAD 5700. Research Design in Public Administration (3). Fundamental concepts and techniques in research design, problem formulation, execution, and analysis, stressing applications in public policy. Includes measurement, statistics.

PAD 5700L. Research Design Laboratory (0). (S/U grade only.) Laboratory linked to and required of all students in PAD 5700. Instruction in computer techniques, in-class statistics and methods exercises, supplementary lecture material.

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 5701L. Quantitative Analysis in Public Administration Laboratory (0). (S/U grade only.) Prerequisites: PAD 5700, 5700L. Laboratory linked to and required of all students in PAD 5701. Intensive instruction in computer techniques, in-class exercises in statistical techniques and methods, supplementary lecture material.

PAD 5710. Information Resource and Communication Management (3). This course in communication, information resource management and information technologies is aimed at administrators in the public and not-for-profit sectors. It deals with basics of information technologies; organizational and other communications or information exchange networks; the interaction of government and non-profits with clients, citizens, other agencies or institutions; and the virtual state.

PAD 5826. Intergovernmental Management and Relations (3). The role of the public administrator in developing and administering public policy within the system of federal, state, and local governments. Includes legal, financial, administrative issues as well as substantive areas such as social services, health, employment, education, and housing.

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 5846r. Health Policy and Public Administration (3). Prerequisites: Graduate standing, PAD 5700, 5701 or equivalents. Addresses theory and critical issues in health policy formation, implementation, and administration. Major topics include health politics, the economics of health care, regulatory issues, access, and payment issues. May be repeated to a maximum of six semester hours.

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 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). Unlimited repeatability.

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 5948r. Supervised Teaching (1-5). (S/U grade only.) May be repeated to a maximum of five semester hours.

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 6107. Seminar: Public Organizational Development (3). Prerequisite: PAD 5106 or equivalent. Paradigms of organizational change and their implications for values.

PAD 6108. Institutions, Policy & Management (3). Prerequisite: PAD 5053. Course covers how formal institutional arrangements and constraints influence and structure policy choices and administrative decisions. Examines the consequences of organizational arrangements and policy instruments for policy and management.

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 6115. The Executive (3). The contemporary political executive, especially the American Presidency. Organization, leadership, personality, power, ideology, relationships, decision, policy. (Also offered by the Department of Political Science.)

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). Studies and analysis of management systems, institutions, and dynamics in Florida agencies, with emphasis on legislative-executive relations.

PAD 6418. Seminar: Human Resource Management (3). Prerequisite: PAD 5417 or equivalent. Theory, critical issues involved in human resource management, including historical evolution, representativeness of bureaucracy, civil service reform, compensation systems, executive personnel. Review of literature for preliminary exams; development of publishable papers.

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 6980. 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 Information Systems; Statistics

RADIO, TELEVISION:
see Communication

READING AND LANGUAGE ARTS:
see Childhood Education, Reading, and Disability Services

REHABILITATION COUNSELING:
see Childhood Education, Reading, and Disability Services

Master of PUBLIC HEALTH

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://www.coss.fsu.edu/publichealth/>

Director: William G. Weissert; **Assistant Director:** Alan Rowan; **Faculty:** Burdette, Coutts, Hill, J. Jordan, L. Jordan, Showman

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).

MPH degree graduates are trained principally as health policy analysts. They acquire a rich background in epidemiology, health care finance, 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.

Requirements

Students must meet the University's general requirements for graduate admission and must be recommended by the program's admissions committee. A baccalaureate degree from an accredited institution and an acceptable score from the general portion of the Graduate Record Examination are required. The minimum admission guidelines are for an undergraduate upper division grade point average of 3.0 or better and a minimum combined GRE score of 1000. MCAT or GMAT scores may be substituted for the GRE. Higher attainment on one measure may offset lower attainment on another. These indicators are considered along with other evidence of preparation. For students whose native language is not English, a TOEFL score is required.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

The program of study includes a set of required and elective courses, an internship, a capstone project, and an e-folio. Students can set their own pace from part-time to full-time. With appropriate planning, the program's requirements may be completed in three-four semesters and a summer. Other students prefer to follow a more relaxed pace.

For the Combined Bachelor of Science/Master of Public Health (BS/MPH), 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.

In order to better prepare students for overlapping careers in Planning and Public Health, a joint degree program 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 degree programs of this kind nationwide. Students will complete requirements for the MPH and MSP with a total of sixty-six credit hours. Some courses overlap, reducing total credit requirements.

Total Credits

Students must complete forty-two credit hours including thirty required hours, a three hour internship, and twelve hours of electives. A capstone project is included in the core hours. Also required is an e-folio constructed by each student throughout his or her course of study, including indications that public health competencies have been met, examples or projects completed, writing samples, courses, summaries, resume, and other materials indicating preparedness for a career in public health.

Course Requirements for the Master of Public Health (forty-two credits)

Required MPH core courses (thirty semester hours):

CPO 5934r Selected Topics (3)

Note: The Required topic is *Comparative Health Policy* (3)

HSC 5216 Environmental Health (3)

ISS 5930r Special Topics in Social Science (1-3)

Note: The required topic is *Comparative Health Policy* (1-3)

Note: Alternatively, URP 5521 *Public Health Epidemiology* (3)

ISS 5945r Internship (3-6)

PAD 5935r Seminar in Public Administration: Selected Topics (1-3)

Note: The required topics are as follows: *Health Care Finance* (1-3); *Health Management* (1-3)

PUP 5607 Politics of Health Policy (3)

Note: Alternatively, GIS 5400 *GIS Application in Social Sciences* (3)

PUP 5932r Selected Topics (3)

Note: The required topic is *Health Services Organization and Policy* (3)

SYA 5455 *Social Statistics and Data Analysis* (3)

Note: Alternatively, STA 5172 *Biostatistics* (3)

URP 5939r Special Topics in Urban and Regional Planning (0-3)

Note: The required topic is *Health Behavior and Education* (3)

Approved MPH Electives (Twelve semester hours): Select six semester hours from Group 1 and six semester hours from Group 2.

GROUP 1

GEO 5934r Seminar in Current Topics (1-3)

Note: The elective topic is *Medical Geography* (3)

HSC 5203 Public Health History, Philosophy and Policy (3)

ISS 5930r Special Topics in Social Science (1-3)

Note: The elective topics are as follows: *Applied Public Health* (3); *Public Health Ethics* (3); *Public Health Law* (3); and *Infectious Disease Epidemiology* (3)

PAD 5935r Seminar in Public Administration: Selected Topics (1-3)

Note: The elective topic is *Public Health and Emergency Management* (3)

PUP 5607 Politics of Health Policy (3)

SYA 6933r Selected Topics in Sociology (3)

Note: The elective topics are as follows: *Social Epidemiology* (3); *Medical Sociology*; and *Neighborhood, Stress and Unhealthy Behaviors* (3)

GROUP 2

ECO 5936r Special Topics (1-3)

Note: The elective topic is *Health Economics* (1-3)

GEO 5908 Directed Individual Study (1-6)

Note: The elective topic is *GIS Lab* (1-6)

GIS 5105 Geographic Information Systems (3)

Note: Not approved if other GIS course already taken.

GIS 5400 Geographic Info Systems Applications in Social Sciences (3)

ISS 5930 Special Topics in Social Science (1-3)

Note: The elective topic is *Health Regulation* (1-3)

LIS 5912r Issues in Information Studies (1-3)

Note: the elective topic is *Health Informatics* (1-3)

SYA 6933r Selected Topics in Sociology (3)

Note: The elective topic is *Applied Data Analysis for Public Health* (3)

URP 5272 Urban and Regional Info Systems (3)

Note: Not approved if other GIS course already taken.

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 400-hour internship experience is evaluated by the preceptor in the health setting, the student, and the faculty adviser. In special instances, the internship requirement may be partially or fully waived with appropriately documented justification. Waived credits must be made up in an approved elective.

Capstone Project (hours included in core above)

All students must complete a capstone project consisting of a policy-analysis paper on a topic of their own choosing in conjunction with PUP 5607, Politics of Health Policy or GIS 5400, Geographic Information Systems Applications in Social Sciences. The paper will draw upon earlier courses as well as the capstone course to provide a capstone experience. GEO 5934 Seminar in Current Topics or other GIS course may be required as a prerequisite for GIS 5400.

Prerequisite Courses as needed (three to six semester hours)

Some courses may require prerequisites for students deemed not adequately prepared to handle the course material. Prerequisite credits may not be counted toward core, elective or total credit requirements.

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 5216. 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 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 5912. 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.

Program in PUBLIC SAFETY AND SECURITY

COLLEGE OF APPLIED STUDIES

Web Page: <http://appliedstudies.pc.fsu.edu/Academics/>

Program Coordinators: Tom Kelley, Dale Nute; **Associate In:** Zinszer

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 Angie Sexton by e-mail at asexton@pc.fsu.edu or by phone at (850) 770-2178.

Certificate in Crime Scene Investigation

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 bachelor's or master's degree. For more information, please visit <http://www.pc.fsu.edu/Academics/Certificate-Programs/Underwater-Crime-Scene-Investigation-Certificate-Program> or contact Dr. Tom Kelley by e-mail at tkelley@pc.fsu.edu, Dr. Dale Nute by e-mail at dnute@pc.fsu.edu, or Mike Zinszer by e-mail at mzinszer@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 Jerome Fleeman by e-mail at sharefsupc@gmail.com, contact the FSU Panama City Dive Locker at (850) 770-2206, or visit the club's Web site at <http://pc.fsu.edu/QUICK-LINKS/Current-Students/Student-Organizations/Sharc>.

Definition of Prefixes

CJE—Law Enforcement

ISC—Interdisciplinary Sciences

Graduate Courses

CJE 5766. Forensic Science in Investigation (3). This course combines theories of the conduct of crime with knowledge of how physical evidence is produced during the commission of a crime to produce information that enables the investigation and prosecution of criminal activity. The course emphasizes decision-making in forensic science examinations and evaluation of the reliability of these examinations.

CJE 5766L. Forensic Science in Investigation Laboratory (2). Corequisite: CJE 5766. This laboratory applies various techniques for the examination of physical materials generated during the commission of a crime in order to produce information required to detect and investigate criminal activity. This laboratory emphasizes the implementation and development of protocols and the calculation of error rates. Additional equipment fee required.

CJE 5767. Scientific Underwater Investigation (3). Prerequisite: CJE 3761. 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.

CJE 5767L. Scientific Underwater Investigation Laboratory (1). Prerequisite: CJE 3761L. Corequisite: CJE 5767. 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.

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.

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.

Department of RELIGION

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://religion.fsu.edu/>

Chair: John Corrigan; **Professors:** Corrigan, Cuevas, Dupuigrenet, Kelsay, Porterfield, Twiss; **Associate Professors:** Erndl, Goff, Kalbian, Kavka, Kelley, Koehlinger, Levenson; **Assistant Professors:** Day, Gaiser, Hellweg, Irving, Yu; **Professors Emeriti:** Carey, Jones, Moore, Rubenstein, Sandon

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 is a "B" average on all undergraduate work and a combined score of at least 1,000 on the quantitative and verbal sections of the Graduate Record Examinations (GRE). Students entering the program are normally expected to have as background the equivalent of at least an undergraduate minor in the study of religion.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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 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 REL 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 department Web site (<http://religion.fsu.edu/>) to obtain more detailed information about faculty associated with and requirements for particular areas of concentration.

Doctorate 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 department Web site (<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

REL—Religion

SRK—Sanskrit Language

Graduate Courses

Note: Students should contact the Department of Religion office for the most up-to-date information concerning course offerings.

HPS 5340. Freud and the Invention of the Modern Mind (3). This course explores Freud's life, work, and legacy against the backdrop of the histories of science. The course is built around the close reading of key Freudian texts and is divided into three thematic sections. The first section, Freud as Detective, examines Freud's case histories and clinical reflections. The second section, Freud as Archaeologist, studies Freud's attempt to excavate the psychological complexity of everyday life. The third section, Freud as Critic, scrutinizes Freud's macro-sociological theorizing.

HPS 5345. Power, Knowledge, and Control: Foucault and the History of Human Sciences (3). This course is built around a systematic reading of Foucault's provocative historical and philosophical reflections on the "all-too human" history of the human and social sciences. Readings include recently-published lectures from Michael Foucault's tenure at the Collège de France, as well as texts that have become classics, such as *Order of Things* and *Discipline and Punish*.

REL 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.

REL 5195r. Seminar: Religion and Culture (3). May be repeated to a maximum of nine semester hours.

REL 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.

REL 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.

REL 5297r. Seminar: Biblical Studies (3). May be repeated to a maximum of nine semester hours.

REL 5305r. Seminar: History of Religions (3). May be repeated to a maximum of nine semester hours.

REL 5319r. 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.

REL 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.

REL 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.

REL 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.

REL 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.

REL 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.

REL 5365. 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.

REL 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.

REL 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.

REL 5497r. Seminar: Religious Thought (3). May be repeated to a maximum of nine semester hours.

REL 5515. Christianity in Late Antiquity (3). Christian thought, institutions, lifestyles, and literature in their social, cultural, and historical contexts from the time of Jesus to the early Middle Ages.

REL 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.

REL 5565. 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.

REL 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.

REL 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.

REL 5906r. Directed Individual Study (1-3). May be repeated to a maximum of twelve semester hours.

REL 5910r. Tutorial in Pali (1-3). A study of the grammar, vocabulary and style of the Pali canon to better understand both the Buddhist philosophical concepts and the culture of ancient Buddhist India. May be repeated to a maximum of twelve semester hours.

REL 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.

REL 5915r. Tutorial in Sanskrit Texts (1-3). Prerequisite: SAL 4101, or equivalent. Readings in Sanskrit of selected religious texts. Topics will vary by semester. May be repeated to a maximum of twelve semester hours.

REL 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.

REL 5937r. Special Topics in Religion (3). May be repeated to a maximum of twelve semester hours.

REL 5940. Supervised Teaching (3). (S/U grade only.) A maximum of three hours may apply to the master's degree.

REL 5971r. Thesis (1-6). (S/U grade only.) A minimum of six semester hours is required.

REL 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.

REL 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.

REL 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.

REL 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.

REL 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.

REL 6980r. Dissertation (1-12). (S/U grade only.) May be repeated to a maximum of twenty-four semester hours.

REL 8964r. Preliminary Doctoral Examination (0). (P/F grade only.) May be repeated in the same semester.

REL 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

REL 8976r. Master's Thesis Defense (0). (P/F grade only.)

REL 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

Department of RETAIL MERCHANDISING AND PRODUCT DEVELOPMENT

COLLEGE OF HUMAN SCIENCES

Web Page: <http://www.chs.fsu.edu/rmpd>

Chair: Mary Ann Moore; **Professors:** Fiorito, Goldsmith, Moore; **Associate Professors:** Grise, Heitmeyer, Kim; **Associate in Merchandising and Internship Coordinator:** Judy Miler; **Director, Center for Retail Merchandising and Product Development:** Langston; **Professors Emeriti:** Davis, Edgeworth, Kuehne, Warden

The major in Global Merchandising and Product Development in the Department of Retail Merchandising and Product Development (RMPD) has a strategic direction that is designed for students who seek greater depth in the global aspects of merchandising and product development. Courses within this major will expand the knowledge and skills relevant to the physical, behavioral, and economic factors influencing the consumer in the global merchandising and product development environment. Innovative instruction will incorporate the latest technologies and focus on product development from concept to consumer. The global perspective will be achieved not only by an understanding of the international supply chains but also through studying different target markets. This is a non-thesis major designed to provide students with a firm foundation and strong preparation for corporate management positions in merchandising and product development.

The department provides outstanding facilities and leading-edge technology for its majors to immerse them in relevant industry technology. The **Product Development Lab's** multi-media computers are equipped with the latest in computer product development and merchandising software, Kaledo, Adobe Photoshop and Illustrator, word processing, spreadsheet, and presentation packages. The lab utilizes curriculum that prepares students for the work interfaces they will encounter in industry. **Macy's Merchandising Laboratory**, one of the few university merchandising labs in the United States, provides operational experience with merchandise presentation techniques and inventory management in a retail store facsimile, preparing students for operational challenges in-store. The **Office Depot Technology Complex** is a hands-on laboratory with retail industry adopted software where students use real-world retail reporting and other technology-related skills. **Textile Evaluation and Research Laboratory Complex** provides students with a critical understanding of textile science and its impact on a variety of consumer products. The latest color communication technology, modern chemical and physical testing facilities, and computerized analytical equipment are found in this complex. The **Historic Clothing and Textiles Collection** provides museum-quality conservation, storage, and display space for an outstanding teaching and study collection. Apparel and accessories in the collection date from the late 1700's, with pieces tracing the history of Florida and its residents, including garments and textiles of the Seminole Indians. Textile pieces include the unique Carter Collection of pre-Columbian Peruvian textiles from the late 1400's. A highly accessible teaching and research faculty provides students with a challenging academic environment. The department is also the home of the **Center for Retail Merchandising and Product Development**. The activities of The Retail Center provide an exchange between the retail industry and RMPD to maintain relevance and rigor in the curriculum. Additionally, The Retail Center provides many networking and project opportunities for RMPD students.

The decision to accept a student for graduate study is made by the departmental graduate faculty, contingent upon meeting University and college admission requirements and is based on the quality of the applicant's credentials as compared to others in the graduate admissions pool. In addition to the application materials required by the University, the department requires three letters of recommendation and a one-two page statement of professional goals. Students who do not have previous coursework in the field of study are encouraged to apply, although background courses will be required. These may be completed while in residence for the graduate degree, but do not apply toward degree credit.

Financial Aid

To allow qualified students to pursue graduate degrees, teaching and research assistantships and college and University fellowships are available on a competitive basis. Application materials should be submitted to the department by January 1st to ensure consideration for the following Fall. Forms are available upon request. Information concerning other types of financial aid may be obtained by contacting: *Office of Financial Aid, A4400 University Center A, Florida State University, Tallahassee, FL 32306-2430.*

Master of Science (MS) Programs

Global Merchandising and Product Development

The master's degree program in Global Merchandising and Product Development is a coursework program that provides students with professional preparation for stimulating careers in management positions in the production, distribution, and consumption areas. The primary mission of this major is to provide students with advanced knowledge to tackle problems and issues in global merchandising and product development and to apply best practices in solving these problems at the corporate level. The program of study for this major is designed to extend and deepen the core curriculum recommendations made by RMPD industry partners. Content will include, but is not limited to: color communication, computer-aided design, consumer research, creative and innovative problem solving, leadership, promotions and branding, product development and performance, retail merchandising theory and research, state-of-the-art technology communication strategies, sourcing and procurement, and sustainability. Application of these advanced knowledge areas to the integrated field of merchandising and product development in the global economy is the distinction of this major. Graduates will be able to create value for a corporation with integration of knowledge and skills focused on all aspects of global products including development, merchandising, and sourcing with an emphasis on consumer research. The tremendous growth in large multinational brands requires professionals to be globally oriented. Program of study for the master's degree requires a minimum of thirty-three semester hours. Final approval of the program of study rests with the supervisory committee; students without an undergraduate degree in the field will be required to take additional leveling courses. Detailed course requirements are available from the department. This major is significantly linked to the Center for Retail Merchandising and Product Development. Master's students in the major will have the opportunity to connect with industry partners through the Center. The research of the department's faculty members will contribute effectively to the Center's mission.

Definition of Prefixes

COA—Home Economics: Consumer Economics

CTE—Home Economics: Clothing, Textiles and Merchandising

Graduate Courses

COA 5971r. Thesis (1-6). (S/U grade only.) A minimum of six semester hours is required for the master's degree.

COA 6980r. Dissertation (1-24). (S/U grade only.)

COA 8985r. Dissertation Defense Examination (0). (P/F grade only.)

CTE 5426r. Recent Developments in Textiles (3). Prerequisite: Previous textile coursework. This course offers in-depth analysis of current, specialized topics in textiles with a focus on economics, environmental, and technological factors related to textiles and apparel production.

CTE 5538. Historic Textiles and Clothing Collection Management (1-4). Prerequisite: Instructor permission. Practicum at Florida State University Historic Clothing and Textiles Collection. Students will learn proper textile preservation, conservation, storage and display techniques for flat textiles and garments. Other experiences may include museum education, informatics, and data base management. This course may be repeated to a maximum of six semester hours.

CTE 5807. Retail Merchandising Concepts (2-4). Prerequisites: MAC 1105, MGF 1106, or MGF 1107. This course is designed to give graduate students an accelerated overview 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 5815r. Retail Technologies (3). In-depth study of the principal retail technologies and systems currently being developed and used for internal retail management and for global supply chain management. May be repeated once as course content changes, with permission from the instructor.

CTE 5816. Merchandising Organization (3). Prerequisites: CTE 4822; MAR 3023, or their equivalents. Synthesis of knowledge concerning retail merchandising emphasizing organizational structure and operational methods.

CTE 5828. Merchandising Buying (3). Prerequisites: CTE 4822; MAR 3023, or their equivalents. Techniques and theories of retail buying with emphasis on the buyers retail management role.

CTE 5833. Merchandising of Small Business Enterprises (3). Issues resulting from the interaction between a family and the business that is owned by that family. Guest speakers include family business owners, bankers, accountants, lawyers and government officials who deal with family businesses.

CTE 5834. Merchandising Theory and Research (3). Prerequisite: Merchandising or retailing coursework. Course focuses on the theories utilized in merchandising, including evaluating the use of these theories in current research.

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. Professional development through practical experience in retail merchandising.

CTE 5906r. Directed Individual Study (1-3). May be repeated to a maximum of six semester hours.

CTE 5911. Research Analysis in Clothing and Textiles (3). 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.) May be repeated to a maximum of three semester hours.

CTE 5930r. Clothing and Textiles Seminar (1). Exploration of current research in textiles and consumer sciences. May be repeated to a maximum of twelve semester hours.

CTE 5942r. Supervised Teaching (1-3). (S/U grade only.) May be repeated to a maximum of three semester hours.

CTE 5945r. Museum Studies Internship (1-6). Prerequisites: CTE 3515 or CTE 3516. Internship at an institution approved by the Museum Studies program. The emphasis must be on historic clothing, textiles, or accessories. The experience provides an opportunity to apply and expand knowledge in areas of museum studies such as storage, display, education, informatics, and management. May be repeated to a maximum of six semester hours.

CTE 5971r. Thesis (1-6). (S/U grade only.) The minimum number of thesis hours for completion of a master's degree is six.

CTE 6900r. Readings in Clothing, Textiles, and Merchandising (1-3). (S/U grade only.) May be repeated to a maximum of six semester hours.

CTE 6932r. Clothing and Textiles Seminar (1). Exploration of current research in textiles and consumer sciences. May be repeated to a maximum of twelve semester hours.

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. May be repeated to a maximum of twelve semester hours.

CTE 6980r. Dissertation (1-24). (S/U grade only.)

CTE 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

CTE 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

CTE 8976r. Master's Thesis Defense (0). (P/F grade only.)

CTE 8985r. Dissertation Defense (0). (P/F grade only.)

Department of RISK MANAGEMENT/INSURANCE, REAL ESTATE AND LEGAL STUDIES

COLLEGE OF BUSINESS

Web Page: <http://cob.fsu.edu/rmi/>

Chair: G. Stacy Sirmans; **Professors:** Beck-Dudley, Born, Corbett, Diskin, Gatzlaff, Maroney, C.F. Sirmans, G.S. Sirmans; **Associate Professors:** Cole, Dumm, McCullough; **Assistant Professors:** Marzen, Orozco, Prum; **Research Associates in Legal Studies and Real Estate:** Bailey, Woodyard; **Assistants in Risk Management and Insurance:** Medders, Nyce; **J. Harold and Barbara M. Chastain Eminent Scholar in Real Estate:** C.F. Sirmans; **Kenneth G. Bacheller Professor of Real Estate:** G.S. Sirmans; **Mark C. Bane Professor in Business Administration:** Gatzlaff; **Kathryn Magee Kip Professor:** Maroney; **Independent Life & Accident Insurance Company Professor:** Corbett; **State Farm Insurance Professor of Risk Management and Insurance:** McCullough; **Robert L. Atkins Professor in Risk Management and Insurance:** Born; **Francis J. Nardoza Scholars Program Fellow:** Diskin; **Peoples First Insurance Fellow:** Dumm; **Waters Fellow 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 management with a major 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 MBA program, 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.

Doctoral Program

The College of Business offers a doctoral program in business administration and a master's program in management with a major in risk management/insurance. 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 risk management/insurance major for the Master of Science program 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.

Requirements

The Master's degree with a major 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.

Definition of Prefixes

BUL—Business Law

REE—Real Estate

RMI—Risk Management/Insurance

Graduate Courses

Master's

Note: The 5000-level courses are 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.

BUL 5810. The Legal and Ethical Environment of Business (1–4). 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 the mortgage capital markets. This includes a description of the primary and secondary markets, mortgage securitization, valuation of mortgage-related securities, commercial mortgage market analysis, and emerging topics of special interest.

REE 5209. Advanced Real Estate Finance and Investment (3). This course provides advanced treatment of the commercial mortgage and real estate equity markets. Topics include in-depth discussion of financing income-producing properties; commercial mortgage underwriting; real estate investment trusts; and the decisions faced by institutions regarding their property and mortgage portfolios. Emerging topics of special interest also are discussed.

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 5315. Real Estate Project Feasibility Analysis (3). Introduction to real estate decision-making process for determination of real estate site use or investment being used, dealt with, or pursued.

REE 5435. Real Estate and Its Legal Environment (3). This course presents an overview of the real estate markets and the laws affecting land use. This course provides an advanced treatment of the legal environment of real estate, including those issues related to property ownership and its transfer, and the contracts applied in the acquisition, operation, and disposition of property.

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.

REE 5935r. Special Topics in Real Estate (1–3). In-depth study of current topics in real estate. May be repeated to a maximum of nine semester hours when topics change.

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 5087. International Risk Management (3). Prerequisite: BUL 5810. This course addresses risk management and insurance from an international perspective.

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 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). Prerequisite: RMI 5017. 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). In-depth study of current topics in risk management and insurance. May be repeated to a maximum of three times as topics change.

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.

RMI 5971r. Thesis (3–6). (S/U grade only.) A minimum of six semester hours is required.

RMI 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

RMI 8976r. Master's Thesis Defense (0). (P/F grade only.)

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

Interdisciplinary Program in RUSSIAN AND EAST EUROPEAN STUDIES

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://www.coss.fsu.edu/russia/>

Director: Lee Metcalf (Social Sciences)

Russian and East European Studies is an interdepartmental program leading to the degree of Master of Arts (MA). 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, 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

A candidate is admitted to the program by meeting the general requirements for graduate study. All applicants must take both the verbal and quantitative portions of the Graduate Record Examination (GRE) prior to admission to 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 may choose either a thirty-three semester hour coursework program or a thirty semester hour course and thesis program. Students selecting the first option will undergo comprehensive examinations on the coursework taken for the degree during their last semester in the program. 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 theses, 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.

Students may select courses broadly from the listing of coursework below, so long as they take a minimum of eight 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. Up to eight semester hours in the thirty-three semester hour program or six in the thirty semester hour program may be 4000-level courses, if no 5000-level equivalent courses are offered by that department.

Language

All students must satisfy the foreign language requirement for the MA degree by demonstrating a reading 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. Students however, are encouraged to go much further in their language training to gain an effective competency in their chosen area language. Up to nine semester hours of language study beyond the initial twelve semester hours can be counted toward the degree requirements when taken under the appropriate 4000 and 5000 level course numberings.

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 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 Blackboard 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 adviser in *211 Bellamy* for further information.

All internships must be approved in advance by the program director.

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 Blackboard Organization site as well as the program office in *211 Bellamy*.

Russian and East European History

Minimum of eight semester hours

EUH 5238	Rise of Nationalism (4)
EUH 5246	World War I: Europe, 1900–1918 (4)
EUH 5249	The Holocaust in Historical Perspective (4)
EUH 5285	Europe in the Cold War and Detente (4)
EUH 5338	History of East Central Europe, 1815 to the Present (4)
EUH 5365	The Balkans Since 1700 (4)
EUH 5578	19th-Century Russia (4)
EUH 5579	20th-Century Russia (4)
EUH 5609	European Intellectual History, 1800 to Present (4)
WOH 5246	World War II (4)

Social Science Track

Minimum of six semester hours

CPO 5091	Core Seminar in Comparative Government and Politics (3)
CPO 5740	Comparative Political Economy (3)
CPO 5934r	Selected Topics (3)
CPS 5424	Research Seminar in Comparative Managerial Organizational Policies (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 5705	International Trade (3)*
ECO 5715	International Finance (3)*
ECO 5716	Seminar in Theory and Policy of International Finance (3)
ECS 5005	Seminar in Comparative Economic Systems (3)
ECS 5335	Economies in Transition (3)
ECP 5115	Seminar in the Economics of Population (3)
GEA 5195r	Advanced Area Studies (3)
GEO 5358	Environmental Conflict and Economic Development (3)
GEO 5425	Cultural Geography (3)
GEO 5465	Historical Geography (3)
GEO 5472	Political Geography (3)
INR 5014	Contexts and International Relation (3)
INR 5036	International Political Economy (3)
INR 5088	International Conflict (3)
INR 5137	Politics of Terror (3)
INR 5934r	Selected Topics (3)
INR 5938	Joint Seminar in International Affairs (3)
SYP 5105	Theories of Social Psychology (3)
SYP 5305	Collective Behavior and Social Movements (3)

* Consult with instructor and/or see course description for required prerequisite coursework.

Arts and Humanities Track

Minimum of six semester hours

ANG 5275	Human Conflict (3)
ANG 5493	Cultural Anthropology (3)

- ARH 5220 Early Christian and Byzantine Art (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 5505r 19th-Century Philosophy (3)
 REL 5035 Seminar: Introduction to the Study of Religion (3)
 REL 5195r Seminar: Religion and Culture (3)
 REL 5305r Seminar: History of Religions (3)
 RUS 5415r Graduate Russian Conversation and Comprehension (3) (S/U grade only.)
 RUS 5455 Russian Stylistics (3)
 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 5405 Old Russian Literature (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 Middle and Secondary 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

Interdisciplinary Program in SCIENCE TEACHING

COLLEGE OF ARTS AND SCIENCES & COLLEGE OF EDUCATION

Web Page: <http://bio.fsu.edu/osta/>

This interdisciplinary major is designed to combine the undergraduate and graduate-level experiences of the Colleges of Arts and Sciences and Education to produce exceptionally well-prepared science teachers. The program allows students to take graduate level courses in their senior year that count toward both the bachelor's and master's degrees. Students completing this "3 + 2" program will receive a Bachelor of Science (BS) degree at the end of the fourth year, and a Master of Science Teaching (MST) degree at the end of the fifth year. They will be qualified for certification to teach science in middle and high schools in Florida, and prepared for national certification.

For more information, contact Dr. Ellen Granger at (850) 644-6747, or Lance King at (850) 644-1142.

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 5525. **Advanced Portfolio Design (1).** Corequisite: ISC 5535. This course teaches students how to design and construct teaching portfolios in Chalk and Wire.
 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 (9).** Prerequisites: ISC 5525, 5535, 5944, 5946. Corequisites: ISC 5098, 8938. Students in the Master in Science Teaching program complete at least thirteen weeks of student teaching in the classroom.
 ISC 5946. **Half-Time Teaching Internship (6).** Prerequisites: ISC 5525, 5535. Corequisite: ISC 5944. Students concentrate on observing the management, teaching, and assessment strategies of a supervising teacher and complete two work sample teaching units, each at least a week long in the classroom.
 ISC 8938. **Portfolio Review (0).** (S/U grade only.) Prerequisite: ISC 5525. Corequisite: ISC 5945, 5098. This zero-credit course is required to allow assessment of students' individual portfolios based upon Florida's Twelve Educator Accomplished Practices. These portfolios are the summation of work accomplished during the master's degree program, and must receive a positive evaluation for program completion.

Department of SCIENTIFIC COMPUTING

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://sc.fsu.edu/>

Chair: Max Gunzburger; **Associate Chair for Graduate Studies:** Meyer-Baese; **Associate Chair for Undergraduate Studies:** TBD; **Associate Chair for Computing:** Wilgenbush; **Professors:** El-Azab, Erlebacher, Gunzburger, Meyer-Baese, Navon, Peterson; **Associate Professors:** Beerli, Plewa, Slice, Ye; **Assistant Professors:** Lemmon, Shanbhag, Wang; **Research Associates:** Wilgenbush; **Courtesy Faculty:** Barbu, Bukardt, Cao, Dai, Lehoucq, Mascagni, Oates, Parks, Ringle, Thuo, Trenchea, Van Engelen, Wang, Webster, Zhou

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 important 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 traditional disciplines such as biology and ecology, chemical engineering, chemistry, computer science, geology and geophysics, material science, mathematics, mechanical engineering, and physics and astrophysics. Faculty and graduate students are supported in their research by several federal, state, laboratory, and commercial organizations. Further breadth and depth is 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 hold courtesy appointments in the department. These faculty members ensure that the department is ideally positioned to offer innovative degree programs that impart a synergy between the mathematical and applications 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.

Computational Resources

The Department of Scientific Computing oversees a large and diverse computing infrastructure in support of research and education. Computing resources include large supercomputers, a number of clusters and computational servers, a laboratory for scientific visualization, 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 **Visualization Laboratory** provides high-powered visualization resources to the FSU community for research, analysis of large data collections, 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*.

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 ap-

plication for admission, application fee, official transcript from each college attended, and a transcript of Graduate Record Examinations (GRE) scores should be sent to the *Office of Admissions, A2500 University Center, Florida State University, Tallahassee, FL 32306-2400*.

In addition, the following information should be submitted to the Associate Chair for Graduate Studies, *400 Dirac Science Library, Florida State University, Tallahassee, FL 32306-4120*: 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 who know the applicant's education and/or professional background. In addition, the applicant should complete the online application found at the Department of Scientific Computing Web site. 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 combined score of 1100 (a minimum of 650 on the quantitative aptitude portion). Foreign nationals whose native language is not English must meet Florida State University's minimum TOEFL examination requirement.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

The student should also refer to the Department of Scientific Computing Web site at <http://www.sc.fsu.edu> or contact the Associate Chair for Graduate Studies for any revisions to the requirements listed above since the publication of this document.

Master's Degree

The MS degree in Computational Science provides two main tracks for students. The goal of both tracks is to train students within an interdisciplinary atmosphere.

The first track is intended for students who are seeking a PhD in computational science but also want to obtain an MS degree. It is also appropriate 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.

The second track is for students who want a professional master's degree and who ultimately seek employment in the non-academic sector and wish to have the option of pursuing a research management career. It provides students the opportunity to acquire professional skills such as communication or management skills. Hands-on experience through a summer internship allows the professional master's student to integrate material learned through course work with problems of interest to industry and government agencies. The professional master's track allows students the option of specializing in computational molecular biology/bioinformatics rather than following a general computational science track.

MS in Computational Science

This degree requires a total of thirty-two 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 ten semester hours must be satisfied through additional approved course work, thesis hours, seminars, etc. In addition, a student must write and defend a thesis or project.

The professional master's track requires a total of thirty-six 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, a minimum of six hours from approved courses from other departments, six hours of approved professional electives, and an internship. The remaining semester hours must be satisfied through additional approved course work, thesis hours, seminars, etc. In addition, a student must write and defend a project.

Detailed, up to date information about the MS degree in Computational Science can be found in the Graduate Handbook available at the Department of Scientific Computing Web site.

Doctoral Degree

The doctoral degree is awarded in recognition of the student's broad knowledge of computational science and the student's ability to do 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 his/her supervisory committee, and 5) com-

plete independent research in computational science culminating in a written dissertation which must be successfully defended to the student's supervisory committee.

The doctoral degree in Computational Science has several tracks that allow students to specialize in a particular applied science or engineering area. 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, geological science, materials science, 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 Web site.

Coursework

Required courses are ISC 5305, ISC 5315, ISC 5316, a minimum of twelve semester hours from remaining computational science courses with prefix ISC, plus a minimum of nine semester hours from approved courses from other departments. Additional semester hours can be chosen from other courses, seminars, dissertation credit, etc., approved by the student's supervisory committee to meet the University's minimum course requirement.

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 is capable of doing original, independent research and communicating this research both in a written and oral fashion. 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 adviser. The student and adviser should subsequently establish the student's supervisory committee. In concert with the interdisciplinary nature of the PhD degree program, students may have co-major advisers.

Prospectus

After the student has successfully completed the preliminary examinations and has been admitted to candidacy, the student is required 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 Application Development

ISC—Interdisciplinary Natural Science

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.

ISC 5224. 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 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 5229. Multiscale Modeling of Materials (3). Prerequisites: EGM 5611, EML 5060 or equivalent, or instructor permission. This course covers mathematical and algorithmic basis for atomic scale, mesoscale and continuum scale modeling approaches in material sciences. Emphasis is on the atomic-to-continuum connection, statistical approaches and homogenization problems in continuum modeling of heterogeneous materials. The course offers concrete examples to explain basic ideas and involves projects to apply concepts discussed in lectures.

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 quality of model simulations is introduced and examples of synthetic cases and real-world applications are used for computer labs and course projects.

ISC 5305. Scientific Programming (3). Prerequisites: working knowledge of one programming language (C++, Fortran, Java), or instructor permission. 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 5306. Programming Skills for Computational Biology and Bioinformatics (3). This course provides a basic programming background sufficient to begin a career in computational molecular biology and bioinformatics. It is also useful for those who want to develop their own programs for simulation or analysis in ecology, evolutionary biology, genetics, or molecular biology. The Java language is used as a platform for presenting the concepts of data types, structures, flow control, and input/output. Programming assignments are biologically oriented. In addition to Java, scripting languages such as Python or Perl are presented for the control of batch processes, file filtering, and simple data analysis.

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). Prerequisite: 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, 5306, 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 5319. Advanced Topics in High-Performance Computing (3). Prerequisite: ISC 5318. This course covers high-performance computing, meaning the use of parallel supercomputers, computer clusters, and everything from software to hardware to speed up computations. Students learn how to write faster code that is highly optimized for modern multi-core processors and clusters, using modern software development tools and performance profilers, specialized algorithms, parallelization strategies, and advanced parallel programming constructs.

ISC 5415. Computational Space Physics (3). Prerequisites: CGS 3406 and PHZ 4151C. 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 5906r. Directed Individual Study in Computational Science (1-3). 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 (1-3). (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 5934. 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 5936. Numerical Methods for Stochastic Differential Equations (3). Prerequisites: MAD 3703; MAP 2302; MAS 3105; SAT 4321; or equivalent or instructor permission. This course provides students with basic knowledge of applied and numerical mathematics useful for scientific and engineering modeling, guided by some problems in applications. Focus is on the numerical solution of stochastic differential equations and Monte Carlo methods. A combination of theory and lab work develops the student's intuition and allow for more insight useful for applications.

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: Adviser 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: Adviser approval. May be repeated with instructor permission.

ISC 8964r. Doctoral Qualifying Examination (0). (P/F grade only.) Prerequisite: Adviser approval. May be repeated with instructor permission.

ISC 8965r. Doctoral Preliminary Examination (0). (P/F grade only.) Prerequisite: Adviser approval. May be repeated with instructor permission.

ISC 8977r. Master's Thesis Defense (0). (P/F grade only.) Prerequisite: Adviser approval. May be repeated with instructor permission.

ISC 8982. Dissertation Defense (0). (P/F grade only.) Prerequisite: Adviser 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, 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. 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.

Interdisciplinary Program in SOCIAL SCIENCE

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://www.coss.fsu.edu/iss/>

Director: Robert E. Crew, Jr., Office of the Dean, College of Social Sciences and Public Policy

Note: The information in this chapter is for reference purposes only for currently-enrolled students. This program is no longer accepting applicants.

The Interdisciplinary Program in Social Science (ISS) offers a course of study that leads to the master of arts (MA) or master of science (MS) and provides a broad background in the social sciences for students who find the curriculum of a single discipline too confining for their individual interests. In addition, the program may be used to develop specific preparation in a number of interdisciplinary fields, including: 1) teaching of social science in the junior college and in the public schools; 2) organization of community and urban change; and 3) budget/policy analysis. Courses are selected from those offered by the participating departments of Anthropology, Economics, Geography, History, Political Science, Sociology, and Urban and Regional Planning, and the Reubin O'D. Askew School of Public Administration and Policy.

Requirements

Admission to the program is limited to students who have a score of 1000 on the aptitude test of the Graduate Record Examinations (GRE) or a 3.0 undergraduate grade point average (GPA). Students admitted to the program must also have a minimum of thirty-six semester hours of undergraduate coursework in the social sciences. Candidates for the MA must meet the University's requirements of foreign language proficiency and must have six hours of graduate study in an arts field (history courses fulfill this requirement).

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Candidates for the master's degree in the ISS program must complete thirty-two semester hours of coursework. This coursework may be distributed so as to receive a broad exposure to the perspectives of the social sciences or so as to receive interdisciplinary instruction in one of several fields of concentration, as identified above.

For those pursuing the first alternative, twelve to eighteen hours must be taken in one field of social science (the major field) and not less than six hours must be taken in each of two additional social science fields (the minor fields).

For those seeking one of the concentrations identified above, a specific combination of courses must be taken. These courses must be identified in consultation with the student's major professor and spelled out in a degree plan agreed to by that person, the program director, and the student's committee.

Each student in the master's program will have a supervisory committee consisting of three faculty members. For those students pursuing the most general course of study, the chair of the committee, or major professor, comes from the department of the major field; the other two members come from the two minor field departments. For those students pursuing a concentration, the chair may be selected for knowledge of the particular field and may come from any department. The two remaining members, also selected for their knowledge of the particular field of concentration, must come from two other departments. The committee is responsible for setting and administering the student's comprehensive examination, and, with the advice of the relevant department, may specify courses in each social science field for students selecting that field as an area of major or minor concentration. The comprehensive examination consists of a written test of three to six hours duration which may involve questions broader than the content of particular courses. The committee at its discretion may also require an oral examination.

Definition of Prefixes

CPS—Comparative Policy Studies

HSC—Health Sciences

ISS—Interdisciplinary Social Sciences

Graduate Courses

CPS 5424. Research Seminar in Comparative Managerial and Organizational Policies (3). Comparative analysis of the political and administrative organization and their implications.

CPS 5906r. Directed Individual Study (3). (S/U grade only.) May be repeated to a maximum of nine semester hours.

CPS 5911r. Supervised Research (1-5). (S/U grade only.) A maximum of three hours may apply to the master's degree. May be repeated for a maximum of five semester hours.

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.

HSC 5945r. Internship (3–6). Placement in employment situations related to each student's academic interest under faculty supervision. Involves research related to a problem or issue facing the sponsor of the internship.

ISS 5125. Introduction to Economics for Executives (3). This course focuses on tools of economic analysis and concepts such as incentives, efficiency, tradeoffs, uncertainty, and inputs into production. It utilizes case studies to illustrate how economic concepts are used by executives to improve managerial performance and how economic thinking contributes to the resolution of problems they face.

ISS 5326. Marketing in the Public and Nonprofit Sector (1–3). This course provides information about the value of a marketing orientation to public and non-profit organizations.

ISS 5386. Information and Communication Management (3). This course examines major management issues in government/nonprofit information technology, including the following: differences in public/nonprofit sectors and private sector; issues surrounding organizational structure for information service delivery; MIS planning and standard setting methods; personnel/staffing issues; procurement; and security and privacy.

ISS 5905r. Directed Individual Study (3). May be repeated to a maximum of six semester hours.

ISS 5951r. Problem Analysis Project (3). This course identifies courses and analyzes significant issue of policy or management related to a student's current or future interest. In the first semester, in collaboration with the instructor, the student identifies an appropriate topic and designs the research. In the second semester, the research is carried out and analysis is done. May be repeated to a maximum of six semester hours.

ISS 5971r. Thesis (3–6). (S/U grade only.) A minimum of six semester hours credit is required.

ISS 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

ISS 8976r. Master's Thesis Defense (0). (P/F grade only.)

SOCIAL SCIENCE EDUCATION:
see Middle and Secondary Education

SOCIAL SCIENCE AND EDUCATION:
see Educational Leadership and Policy Studies

SOCIAL WORK

COLLEGE OF SOCIAL WORK

Web Page: <http://csw.fsu.edu/>

Professors: Abell, Ai, Mazza, Smith, Thyer, Vinton; **Associate Professors:** T. Gomory, Radey, Randolph, Teasley, Wilke; **Assistant Professors:** Garland, Munn, Noel, Onifade, Tripodi; **Faculty Administrators:** Boone, Graham, Stanley; **Assistants in Field Education:** Deckerhoff, Verano; **Associate in Social Work:** Maddox; **Assistants in Social Work:** Ashmore, Berry, Dwyer, F. Gomory, Joseph, Kelley, Keroack, Kintz, Mathis, Ross-Donaldson; **Research Associates:** Calohan, Oehme, Shaheen

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 policy and administrative practice; 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 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 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 oppressed 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+. Policies and Programs in Social Services (3). The course provides an initial opportunity to investigate the relationships among individual and collective social welfare and public policy in American society from a social work perspective, with emphasis placed on understanding these relationships in terms of social and economic justice. Particular attention is paid to acquisition of skills necessary to engage in policy advocacy and formulation consistent with social work values and ethics, fostering an appreciation for the roles played by social workers in the development of the American welfare state, and reviewing the history of the social work profession.

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 provides students with an understanding of the social work profession's history, mission, values, ethics, and roles. Content on generalist social work practice with individuals, families, groups, and communities is covered, and attention is given to working with ethnic minorities, women, gays and lesbians, and disabled people.

SOW 5324+. Group Treatment in Social Work Practice (3). This course examines theoretical foundations and practice techniques of group treatment models. General topics include group purpose, composition, and dynamics; leadership development; stages of group development; evaluation; and the ethical aspects of group work.

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 and Community System Change (3). The course provides students with an advanced understanding of the models for planned change in organizational and community systems. In accordance with systems theory, organizations and communities are understood as interdependent, complex, open systems influenced by other micro, mezzo, and macro systems in the larger environment.

SOW 5335+. Theories and Models of Social Work Practice (3). This class introduces students to a range of theories and models of social work practice within an ecological systems framework. The empirical bases of each theory and model are examined, along with applications to generalist social work practice with various size systems. Attention is given to how theories and models incorporate working with ethnic minorities, women, gays and lesbians, and disabled people.

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 5345. Advanced Social Services Administration (3). This course examines theories of administrative practice and provides skill development in executive leadership, decision-making, strategic planning, and client-centered management. This course adopts a problem-solving approach and exposes students to a variety of complex issues present in the operation and management of social services entities. This course is taught from an interdisciplinary perspective so that students may fully explore the underlying ethical, social, legal, psychological, and political dynamics present when policy must be put into practice.

SOW 5349+. Social Networking and Case Management in Social Work (3). This course examines the history, theoretical underpinnings, and strategies of case management in various service delivery systems. Contemporary issues and implications that impact the practice environment are highlighted. General topics include critical skills in assessment, formal and informal linkage, counseling and consultation, advocacy, mediation and conflict resolution, and monitoring and evaluation. Students apply critical thinking skills and utilize evidence-based practice approaches in case management 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 5535. 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' skills in personnel management in human service organizations to ensure effective service delivery to clients. Attention is given to staff management approaches, staff supervision, employee recruitment and retention, motivation, job design, staff development, and issues of diversity.

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). While funding agencies have their own guidelines, there are some commonalities among grant proposals. 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. Particularly in the public and not-for-profit sectors, grants may be necessary to expand the type or number of resources available to clients; therefore, grant writing is related to social work objectives that stress access to and availability of resources. 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 5623+. Social Work with Black Families (3). This class critically analyzes African-American/black family life, culture, structure, and functioning. The focus is on knowledge and skill development for family intervention. Specifically, students review the historical development of black families in America, evaluate and analyze major family theoretical models, identify practice strategies and gaps and/or deficiencies in the existing social work practice literature, and focus on the advantages and disadvantages of utilizing these models in practice with black families.

SOW 5628+. Mental Health of Diverse Populations (3). This course critically examines various factors that impact the mental health of diverse populations. Students critically review/analyze recent mental health literature concerning the cultural context in which the mental health needs of diverse populations have evolved, the major services required to meet the mental health needs of diverse populations and the availability and accessibility of these services, and the strategies and skills (both micro and macro) necessary to improve the delivery of mental health and mental health related services to diverse populations.

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 is designed to provide 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 agencies and children's mental health agencies. 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 risk and safety assessment protocols and other family assessment instruments.

SOW 5659+. Mental Health and Child Welfare (3). This course provides students with knowledge and skills related to the theory, research, and implications of child and adolescent maltreatment for child development and psychopathology. Course content is presented within the context of child welfare practice and social work with children and adolescents in public agencies and programs. Particular attention is given to common psychological disorders that result from maltreatment and accompanying treatment issues. Issues related to individuals, families, groups, and communities are covered, and attention is given to working with ethnic minorities, women, gays and lesbians, and persons with disabilities.

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 5688+. Living with AIDS: Prevention, Intervention and Care (3). This course provides a comprehensive overview of the biopsychosocial implications of HIV/AIDS. Topics include the origins of the illness, its prevalence and spread throughout world cultures, and its impact on the individual and society. Medical issues are discussed from perspectives of viral acquisition and transmission, treatment trials, intervention in opportunistic infections, medication adherence, and the search for vaccination and cure. Psychological issues are addressed through examinations of the impact of the illness on the individual. Attention is given to variations associated with gender, race, age, and sexual orientation of affected and infected persons, and to the impact of HIV/AIDS on the varying communities of which they are a part.

SOW 5712+. Chemical Dependency Problems and Programs (3). This course includes discussions, readings, lectures, and audiovisual materials on all the major drugs, including alcohol, opiates, stimulants, sedatives, hallucinogens, inhalants, and nicotine. We cover the etiology and epidemiology of drug abuse, physiological and behavioral consequences of drug abuse, treatment approaches, and major policies and programs. Special attention is directed toward drug abuse in special populations, such as women, racial and ethnic minorities, gays and lesbians, persons with disabilities, and the elderly. We also spend a considerable amount of time discussing social work with involuntary clients, since most persons receiving treatment for chemical dependency probably fall into this category. A systems perspective is used to relate drug-using behavior to family, community, and social systems.

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, AIDS, 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 5908r. Directed Individual Study (1-4). (S/U grade only.) May be repeated to a maximum of six semester hours.

SOW 5915r. Supervised Research (1-3). Enables students to engage in a group research project, under the direction of a faculty member. At least one component of the experience would relate to evaluation of social work practice. May be repeated to a maximum of three semester hours.

SOW 5938r+. Social Work Seminars: Selected Topics (3). Examples of topics covered: diagnosis and treatment of addictive disorders, living with AIDS, family violence across the life span, and mind, body and healing. May be repeated to a maximum of nine semester hours as topics change.

SOW 5941r. Supervised Teaching (1-3). (S/U grade only.) Prerequisites: SOW 6696, adviser recommendation, and department consent. May be repeated to a maximum of five semester hours.

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 I (2). This course focuses on the development, testing, and use of measurement tools in social-work practice research. Emphasis is on understanding the conceptual relevance and operational clarity of theoretical constructs and on the methods available for designing and validating instruments to measure them. 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. This course is taught over two consecutive semesters.

SOW 6359. Measurement in Social Work Research II (2). Prerequisite: SOW 6358. This course focuses on the development, testing, and use of measurement tools in social-work practice research. Emphasis is on understanding the conceptual relevance and operational clarity of theoretical constructs and on methods available for designing and validating instruments to measure them. The course examines qualitative and quantitative techniques for their varying contributions to item development and scale construction. This course also explores data-analytic strategies for determining psychometric characteristics. Taught over two consecutive semesters.

SOW 6399. Social Policy Analysis (3). This course analyzes the theoretical and conceptual frameworks necessary for understanding public social policy.

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 6418. Introduction to Linear Modeling for Applied Social Research (4). Prerequisite: An introductory statistics course. This course represents the Statistics I requirement for the Social Work doctoral curriculum. Through seminar and related computer-lab exercises, students receive training in linear model analysis that prepares them for advanced statistical coursework, such as SEM, path analysis, factor analysis, and HLM. This course emphasizes multiple regression (MR), widely used in social sciences to assess relationships among data derived from a variety of research designs. Theoretical and procedural aspects of MR are highlighted. Students learn to conduct MR using categorical and continuous independent measures and interactions. Logistic and probit regressions also are explored.

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. Social Work Research Topics (2). (S/U grade only.) This course familiarizes new doctoral students with a wide range of theories, substantive areas, methods, and analytic techniques utilized in social work research. College of Social Work faculty present their research and cover their inspiration, theoretical and conceptual underpinnings, resources required, research questions, literature, hypotheses, research design, sampling issues, data collection methods, etc.

**SOCIOLOGICAL ANALYSIS:
see Sociology**

SOW 6492. Foundation Research Methods (4). This course focuses on basic research methods, including problem formulation, ethical considerations in planning and conducting research, assumptions, conceptualization, hypothesis building and testing, basic sampling, and various non-experimental, quasi-experimental, and experimental designs. Students study a range of theoretical and political perspectives encompassing both deductive and inductive research traditions.

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 6498. Integrative Seminar (3). This capstone doctoral seminar helps students integrate the information acquired during the doctoral program with the content of the Advanced Research Methods class and other research electives. In preparation for doctoral candidacy, this seminar assists students in consolidating and refining their intellectual work through the development of a research plan. If students choose to develop a dissertation research plan, they must work closely with the members of their committee, as the final approval of the plans rests with the committee.

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 (4). This first-semester doctoral seminar uses an evidence-based framework 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 research designs.

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 6945. 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 8966r. Master's Comprehensive 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.)

Department of SOCIOLOGY

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://www.fsu.edu/~soc/>

Chair: Isaac Eberstein; **Professors:** Carlson, Eberstein, Padavic, Quadagno, Reynolds; **Associate Professors:** Barrett, Brewster, Rohlinger, Schrock, J. Taylor, Tillman, Ueno; **Assistant Professors:** Burdette, Hill, Ramirez, M. Taylor, Tope; **Associate in Sociology:** Schwabe; **Lecturer in Sociology:** Lessan; **Visiting Instructor:** Weinberg; **Professors Emeriti:** Fendrich, Ford, Hardy, Hazelrigg, Isaac, Kinloch, Martin, Nam, Orcutt, Turner; **Affiliate Faculty:** Chiricos, Miles, Milton

The Department of Sociology offers graduate degree programs leading to the Master of Arts (MA), 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 engage in 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 main emphasis is on research, in order to provide the skills needed for employment at top-level research institutes and organizations. Students also obtain the experience and proficiency to teach at the spectrum of institutions of higher learning, including liberal arts colleges, regional universities, and research universities. Numerous graduates also have filled positions in business corporations and government agencies.

The department's most recent addition, the Master of Science with a major in applied social research, may be completed in one calendar year if entered in the Fall semester. One option with this degree program is a specialization in Aging and Health. 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 on the World Wide Web at <http://www.sociology.fsu.edu>.

The Department of Sociology is located in the Bellamy Building in the heart of Florida State University campus and includes such resources as a departmental computer laboratory for graduate students as well as other facilities at the **Pepper Institute on Aging and Public Policy**. The **Center for Demography and Population Health** (also located in Bellamy) contains a library with extensive population and demographic materials that are available to both faculty and students.

Requirements for Admission

Under normal circumstances, departmental requirements for graduate admission into the traditional master's degree program, which generally leads into the doctoral program, include a 3.0 GPA for the last two years of undergraduate study **and** a combined quantitative and verbal score of at least 1000 on the Graduate Record Examination (GRE). Requirements for graduate admission into the master's program in Applied Social Research (a one-year course of study) include a 3.0 GPA for the last two years of undergraduate study **and** a combined quantitative and verbal score of at least 1000 on the GRE. Applicants must also have received a "C" or higher grade in a three semester hour college-level course in statistics.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Most students enter in the Fall semester, although some are admitted into the program during the Spring semester. Students who wish to be considered for fellowships or departmental assistantships must submit a completed application by January 10 of the year preceding their proposed entry into the graduate program. For students only applying for admission, applications for Fall admission are due by May 1st, and applications for Spring admission are due November 1st. Application for admission may be made online at <http://www.sociology.fsu.edu>. Some materials must be submitted both to sociology and to the Florida State University Graduate School Admissions Office. Consult the departmental Web site 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. The following courses or approved substitutes are required:

SYA 5305 Introduction to Research Methods (3)

SYA 5406 Multivariate Analysis (3)

In addition, one of the following research methods courses or an approved substitute is required:

SYA 5315 Qualitative Research Methods in Sociology (3)

SYA 5355 Comparative Historical Sociology (3)

SYD 5135 Techniques of Population Analysis (3)

SYD 5137 Fundamentals of Epidemiology (3)

A minimum of eighteen semester hours of electives is also required.

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. Additional hours may be taken in sociology or in other Social Science departments with approval of the sociology graduate director.

A three hour core course, *Presenting and Interpreting Information*, is required, along with twelve hours of internship. The remaining eighteen hours will be in approved electives such as:

SYD 5136 Lifecourse Epidemiology (3)

SYP 5733 Social Psychology of Aging (3)

SYP 5735 Sociology of Aging (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 Research Methods (3)

SYA 5315 Qualitative Research Methods in Sociology (3)

SYA 5406 Multivariate Analysis (3)

SYA 5515 Sociological Research Practicum (0-3)

SYA 5516 Reporting Sociological Research (3)

SYA 5625r Proseminar (0-3) (S/U grade only.)

SYA 5971r Master's Paper Research (0-6)

Elective courses: a minimum of twelve 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 faculty in the student's specialty area.

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:

1. Complete appropriate courses in major and minor study areas and a seminar in teaching sociology
2. A written examination in the student's major program area
3. Teaching of an undergraduate course
4. A doctoral dissertation

Requirements

There are four areas of study from which PhD students may select major and minor substantive areas: doctoral students must complete five courses in their major (primary) area and three courses in their minor (secondary) area.

Demography addresses issues related to birth (fertility, fecundity), marriage, health (morbidity), death (mortality), and migration (internal to the US and globally), including study of the vital processes and migration, per se, as well as a focus on how social institutions and processes affect and are effected by demographic events.

Health and Aging considers the social distributions of psychological distress and disorder, substance abuse, and deviant behavior. Students also explore the relationship among such issues as health and labor force participation, health and family relationships, public insurance programs for the elderly, and the causes and consequences of inequality in access to health care over the life course.

Stratification and Social Justice involves the study of race, gender, and class inequality, the social movements mobilized to effect social change, inequality in work and labor markets, and the political processes that contribute to or help ameliorate inequality.

Social Psychology enables students to gain expertise in classical and cutting-edge approaches to understanding the relation between the self and society. The area focuses on training students to understand and critically evaluate theory and research on social psychological processes.

Research Methods and Statistics may also be chosen as a minor area.

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 5315 Qualitative Research Methods in Sociology, or SYA 5355 Comparative Historical Sociology
- Three semester hours of SYA 6660, Teaching at the College Level in Sociology
- 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 and Related Area Studies

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 5126. Contemporary Sociological Theory (3). An introduction to the works of a broad range of recent theorists, primarily post-1945. Major emphasis is given to central issues and problems of recent theory and to critical analyses of logical-structural adequacy of theorizing. A student ordinarily completes SYA 5125 or its equivalent prior to this course.

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 5355. Comparative Historical Sociology (3). Seminar on methodological issues in historical comparative research, emphasizing principles of research design. Covers techniques such as archival research, analysis of government documents, and the analysis of household census data. Substantive areas may include the family, welfare state, social movements, class relations, and culture.

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 5455. Social Statistics and Data Analysis (3). Corequisite: SYA 5305. Building on critical issues formulated in SYA 5305, the course provides a bridge between theoretical issues, research methods, and statistical analysis. Topics include the phenomenology of research, reliability and validity, research design strategies, elementary probability theory, probability distribution, hypothesis testing, elementary descriptive statistics, and computing skills.

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 (3). (S/U grade only.) Prerequisite: SYA 5515. Participants edit each others' work, discuss critiques in working sessions, revise drafts, and arrive at a final revision of their master's research paper. The papers ideally will be ready for presentation at professional meetings or submission to a journal. The seminar develops students' skills as writers, critics, and editors.

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 5910r. Supervised Research (1-5). (S/U grade only.) Research on a demographic topic under faculty supervision. Subject varies with each student. May be repeated to a maximum of five 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.

DEM 8977. Master's Research Paper Defense (0). (S/U grade only.) Prerequisite: Completion of master's research paper in demography. Defense of the master's research paper in demography before a faculty master's supervisory committee.

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 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 5255. 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

SYA 5326. Injury Epidemiology (3). This course provides a detailed review of the theoretical approaches, methods, and statistical procedures used in the study of human injury. Attention is given to both individual and mass injury and the behavioral and societal factors leading to the risk of injury.

SYA 6912. Epidemiology Research Paper (6). (S/U grade only.) This course provides the student the opportunity to gain practice, under supervision, in conducting an epidemiological research project. The course is taught as an independent directed research project under the guidance of the major professor.

SYD 5134. Environmental Epidemiology (3). This course provides a detailed review of the theoretical approaches, methods and statistical procedures used in the study of the interactions of people and the environment and the effects on human health status. Attention is given to both traditional and emerging concerns related to the environment and the behavioral and societal factors leading to the risk of health problems related to environmental factors.

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.

SYD 5137. Fundamentals of Epidemiology (3). This course is an introduction to the basic concepts in epidemiology, including measures of disease frequency, and association and study design.

SYD 5138. Infectious Disease Epidemiology (3). This course provides a detailed review of the theoretical approaches, methods and statistical procedures used in the study of infectious disease. Attention is given to both traditional and emerging infectious diseases and behavioral and societal factors leading to infectious disease risk.

SYD 5139. Chronic Disease Epidemiology (3). This course provides a detailed review of the theoretical approaches, methods and statistical procedures used in the study of chronic disease. Attention is given to both traditional and emerging chronic diseases and behavioral and societal factors leading to chronic disease risk.

SYO 5405. Health Institutions and Social Policy (3). This seminar focuses on U.S. health institutions and the forces that shape them. Issues include the role and status of physicians, hospitals, mechanisms of finance, the health care crisis, politics of health and relations to broad social and economic issues, historical and current.

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 5426. Gender and Mental Health (3). This course surveys theory and research on gender and mental health, focusing on sociological theory and research on gender differences in mental health problems in the U.S.

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 5735. Sociology of Aging (3). Seminar analyzes the social institutions that structure the lives of the elderly in modern society. Topics include age status and stratification, labor-force participation and retirement, structures of dependency, political participation and mobilization, and social policy and reform.

SYP 5737. The Dynamics of Aging and Social Change (3). Seminar on the dynamics of aging at various social-organizational levels of analysis. Topics include organizational dynamics of an aging labor force, structural changes relating to morbidity and mortality, and the changing dynamics of group identity formations with a focus on age.

Social Issues and Change

SYP 5738. Aging Policies and Services (3). This course examines issues faced by older people and the current federal and state policies designed to address these issues. These policies and issues are explored in the context of both political economy and the long-term care continuum from independence to dependence.

Social Psychology

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 5006. Identity and the Self (3). This course focuses on sociological and psychological approaches to self and identity along with the cognitive aspects of the self-concept. This an advanced seminar, so students should have a background in sociological theory and methods, social psychology, and/or methods of social science research.

SYP 5007. Sociology of Emotion (3). This course introduces students to the emerging field of the sociology of emotion and affect. The primary focus is on micro and macro theories of emotion, with some empirical studies read. The course attempts to identify gaps in the literature, generate researchable questions, develop testable hypotheses, and ponder appropriate research designs for the student of emotion.

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 dramaturgical theory.

SYP 5516. Sociological Theories of Deviance (3). A review of the major theoretical perspectives in the sociology of deviance. Anomie, social learning, interactionist, and conflict theories are reviewed and critiqued. The problems and characteristics of deviance theory are considered and new directions for theoretical development are explored.

SYP 5733. Social Psychology of Aging (3). This seminar integrates three areas of research: social psychology, social gerontology, and life course research, with a focus on middle and later life. Topics include health, caregiving, retirement, and family relationships.

Stratification 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 5107. Sociology of the Family (3). A survey course on family sociology with a focus on modern U.S. family systems. Course surveys family research and family functioning in modern American society to understand relationships between societal and family conditions and dynamics.

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 6373. Sociology of Work and Labor Markets (3). This seminar examines theories and research about work including new forms of organization and labor markets. Topics include de-industrialization, markets, unions, and professions; internal/external labor markets; worker control; and race, gender, sexuality, age, and work/family intersections.

SYO 6506r. Advanced Research Seminar in Social Organization (3-9). An advanced seminar where students work closely with a faculty member to address the latest theory, research, and development in social organization. May be repeated to a maximum of nine semester hours.

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 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 5447. Sociology of National Development (3). Seminar on theories, processes, and problems of national development. Considers societal evolution, industrialization, capitalist expansion, modernization, dependency, inequality, and related topics.

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 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 5645. Critical Thinking and Proposal Preparation (3). This is a course in scientific criticism. Through evaluation of the strengths and weaknesses of grant applications and of published research articles, course participants develop enhanced capacity to conduct funded research and publish the results.

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 6507. Writing Seminar for Social Scientists (3). This course focuses on the theoretical and practical issues involved in writing a scholarly paper. Topics covered include the structure of a sentence, transitions between sentences and paragraphs, punctuation, the organization of each section of a scholarly paper, and the review process. The course is designed to be useful to graduate students at any stage of their programs.

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 6938r. Selected Topics in Social Institutions, Social Organization, and Social Policy (3). Topics may vary. 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 8945r. Doctoral Review Paper (1-12). (S/U grade only.) A comprehensive review of empirical/theoretical literature in a topical area selected by a student in consultation with the student's major professor and supervisory committee. May be repeated to a maximum of twelve semester hours.

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 8981. Doctoral Review Paper Defense (0). (P/F grade only.) Indicates student has faculty approval for the Doctoral Review Paper.

SYA 8985r. Dissertation Defense (0). (P/F grade only.)

SPANISH LANGUAGE:
see Modern Languages and Linguistics

SPANISH LITERATURE:
see Modern Languages and Linguistics

Department of SPORT MANAGEMENT

COLLEGE OF EDUCATION

Web Page: <http://www.coe.fsu.edu/SM>

Chair and Professor: Jeffrey D. James; **Professor:** Mondello; **Associate**

Professor: Newman; **Assistant Professors:** Giardina, Kim, Rodenberg;

Research Associate: Reynaud; **Associates in Sport Management:** Graf, Nobles

The mission of the Department of Sport Management is to provide high quality, professional education aimed at producing qualified professionals for the sport industry and 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.

Sport Management

Master's Program

The Master of Science (MS) degree in Sport Management emphasizes principles of management 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 course-type MS program consists of thirty-six credit hours; a thirty-four hour thesis-type 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 core concentration emphasizing research in core areas of sport management, as well as a substantial research methods 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 colleges as teachers and researchers, 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 concentrates on the understanding and interpretation 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 emphasizes 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 extant 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 and a letter of intent are also required. Final approval 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.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Sport Management. Master's students 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) and the requisite GRE scores (contact the department office for more information). GRE scores must be submitted in order for an application to be considered complete. Doctoral students must have a master's degree from an accredited institution and present GRE scores that meet the minimum requirements. Meeting the minimum requirements does not guarantee admission. For more details on all programs and admission standards, please refer to the departmental Web site at <http://www.coe.fsu.edu/SM>.

Definition of Prefixes

PEO—Physical Education Activities (Professional): Land–Object Centered

PEP—Physical Education Activities (Professional): Land–Performance Centered

PET—Physical Education Theory

SPM—Sports Management

Graduate Courses

PEO 5002. Educational Games II (3). Prerequisites: PEO 5042, PET 4051. This course focuses on how to plan for skill development in games stages III and IV through the use of extending, refining, and application tasks. An emphasis is placed on the use of game stages and movement framework as a guide for designing a variety of broad-based games experiences for the middle grade and secondary student. Two models (cooperative learning and sport education) are demonstrated in relation to physical education curricula. Graduate students read and report on the current literature related to teaching game strategies in school settings.

PEO 5042. Educational Games I (3). Co-requisites: PET 4710, 4710L. The purpose of the course is to study the appropriate design of educational game experiences from a developmental curriculum model. Students should be able to articulate research in physical education teacher education related to educational games. Emphasis is on using the content analysis and development system to plan learning experiences for the four developmental stages of games.

PEP 5208. Educational Gymnastics (3). Prerequisites: PET 4710, 4710L. The purpose of this course is to provide the foundational knowledge, practical teaching experience, and current research in the content of educational gymnastics.

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 5252. Gender Issues in Sport and Physical Activity (3). Post-structural and feminist theories are used to critically examine the commonplace notions surrounding gender and sport.

PET 5419. Supervision in Physical Education (3). This course helps students practice and develop supervisory skills in working with pre- and in-service teachers. Emphasis is on supervision strategies used to improve teaching effectiveness.

PET 5423. Educational Dance (3). This course prepares students to teach dance and rhythms in the physical education curriculum. Students learn basic movement in educational dance and the proper progression into more formal dance styles such as folk, square, and social. Graduate students incorporate observation and analysis skills in assessing aspects of undergraduate students' work.

PET 5425. Curriculum Design in Physical Education (3). Principles and factors in design and construction of physical education curricula at all grade levels.

PET 5437. Foundations of Movement for Children (3). Movement behavior, performance, and learning of the child. Research regarding these areas.

PET 5447. Secondary School Physical Education Curriculum Theory and Development (3). Study of theory, research, development, and practice in middle and secondary school physical education curricula.

PET 5514. Developing Electronic Teaching Portfolios in Physical Education (3). In this course, students will develop an electronic teaching portfolio to document the growth and development toward the NASPE Advanced Program Standards.

PET 5516. Assessment in K–12 Physical Education (3). This course increases students' knowledge of performance-based assessment related to teaching K–12 physical education. Students focus on four primary themes as a theoretical basis for improving student assessment: 1) using assessment to drive instruction; 2) assessing content across the psychomotor, cognitive, and affective domains of learning; 3) using assessment in ways that allow students to apply information and perform competently; and 4) using a balanced approach when selecting assessment strategies. Students apply concepts from these themes into a field experience component and therefore must have access to a K–12 physical education class to teach.

PET 5645. Programs in Adapted Physical Education (3). Problems in developing and implementing adapted physical education programs in the public schools, private schools, and postsecondary institutions.

PET 5715. Effective Teaching in Physical Education (3). Pedagogical knowledge and skills related to the generic aspects of effective instruction as applied to physical education.

PET 5716. Analysis and Observation of Teaching in Physical Education (3). Examines teaching and managerial behaviors related to psychomotor learning, presents activity-based teacher observation instruments, provides guidelines for the systematic development of instructional skills.

PET 5717. Models in Teaching Physical Education (3). Theory and practice in teaching strategies designed to facilitate learner achievement in the cognitive, affective, and psychomotor domains.

PET 5718. Interdisciplinary Teaching (3). This course provides an in-depth study of the fundamentals of interdisciplinary programs. The course focuses on connected, shared and partnership teaching models that can be used as guides for organizing content, collaborating with others and creating meaningful activities that impact student learning. The course also explores strategies for implementation, including ideas for getting started, selecting a teaching model, developing lesson plans, assessing interdisciplinary learning using alternative strategies and building a support network.

PET 5719. Reflective Teaching in Physical Education (3). This course explores the implementation of a reflective cycle in which goals, assessments, and new directions are identified. Through reading and discussing relevant research literature, students are introduced to several reflective teaching models and practice the use of multiple reflective strategies, including observational learning, reflective teaching and journals, case studies, mental models, and action research. Specific focus is placed on the process for gaining national board certification through the National Board for Professional Teaching Standards.

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 5774. Methods and Materials of Teaching Fitness, K–12 (3). This course focuses on how to implement a lifetime, health-related physical fitness program in school and community settings. Students improve their knowledge of fitness concepts, design learning activities, review the research on physical activity, and develop strategies to research and teach lifetime fitness to children and adolescents.

PET 5971r. Thesis (1–6). (S/U grade only.) A minimum of six semester hours is required.

PET 6706. Research on Teaching (3). Study of the process and implementation of research on teaching. Offered alternate years.

PET 6790. Professional Preparation of Teachers of Physical Education (3). Techniques for the development and operation of programs for professional preparation of teachers of physical education.

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.

PET 6939r. Seminar in Research on Teaching Physical Education (3). Study of the research literature on teaching physical education. May be repeated to a maximum of nine semester hours.

PET 6969. Doctoral Qualifying Exam (0). (P/F grade only.) Examination for doctoral students to determine eligibility to continue in the program.

PET 6980r. Dissertation (1–12). (S/U grade only.)

PET 8964r. Preliminary Doctoral Examination (0). (P/F grade only.)

PET 8966r. Master's Comprehensive Examination (0). (P/F grade only.)

PET 8968r. Specialist in Education Comprehensive Examination (0). (P/F grade only.)

PET 8976r. Master's Thesis Defense (0). (P/F grade only.)

PET 8982r. Dissertation Defense (0). (P/F grade only.)

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). Study of sport/multi-purpose public assembly facility management. 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 5158. Athletic Administration (3). 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 in 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 the 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. Experienced practitioners are invited as guest lecturers to enhance assigned textbook and journal readings.

SPM 5508. Fiscal Management in Sport (3). Course covers principles and factors involved in the fiscal management of athletic/sports programs. 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). The 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 will become familiar with systems used in assessing risk in the sport industry.

SPM 5726. Issues in Sport Law (3). 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 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). The purpose of this course is to familiarize students with a variety of significant issues currently facing managers in the sport industry and to increase the students' ability to critically examine these issues, formulate effective argumentation, and provide recommendations. The course develops the students' ability 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). 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 nine semester hours when topics change.

SPM 5971r. Thesis (3). (S/U grade only.) 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). Prerequisite: 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 & 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 will examine the role and impact of the sport industry and help students identify activities and opportunities in sport management, as well as orient new graduate students to the academic and professional field of sport management.

SPM 6156. Seminar in Administration of Physical Education and Athletics (3). Prerequisite: SPM 5102. The purpose of this course is to provide students with information concerning current research literature and research methods appropriate for administration of physical education and athletics.

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). 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). The 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 6728. Advanced Law in Sport and Physical Activity (3). Prerequisite: Instructor permission. Serving as an in-depth analysis of the aspects of law encountered in the contemporary practice and business of sport, this course will allow 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 also will be addressed. Students will select two topics for in-depth analysis.

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.) The qualifying examination is 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.) The comprehensive examination is 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

Department of STATISTICS

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://stat.fsu.edu/>

Chair: Xufeng Niu; **Director, Statistical Consulting Center:** Ramsier;
Professors: Huffer, McGee, Niu, Patrangenaru, Sinha, Slate, Srivastava;
Associate Professor: Chicken; **Assistant Professors:** Barbu, She, Wu, Zhang;
Associates in Statistics: Bose, Ramsier; **Professors Emeriti:** Hollander, Leysieffer, Lin, Meeter, Sethuraman, Zahn

The Department of Statistics offers programs leading to the Master of Science (MS) in statistics, 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. This certificate is offered in partnership with SAS Institute. 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 PC's 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 and a sequence of real analysis courses are 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:

A four-semester program emphasizing mathematical statistics, which results in an MS in statistics;

OR

A four-semester program emphasizing applied statistics, which results in an MS in statistics;

OR

A four-semester program emphasizing biostatistics, which results in an MS in biostatistics degree;

OR

Undergraduates may enroll in a 5-year combined BS/MS degree. The graduate degree earned is the master's degree emphasizing applied statistics.

All of the 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 M.S. degrees 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: Some exposure to introductory statistics 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 the student 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, an overview of SAS statistical procedures including statistical graphics, an introduction to SAS's macro capabilities for automating repeated analyses, and an introduction to IML Plus, SAS's recently released interface to its interactive matrix language.

STA 5106. Computational Methods in Statistics I (3). Prerequisites: At least one previous course in statistics above STA 1013; some previous programming experience; or instructor permission. Matlab and a programming language (C/Fortran) will be used. Floating point arithmetic, numerical matrix analysis, multiple regression analysis, nonlinear optimization, root finding, numerical integration, Monte Carlo sampling.

STA 5107. Computational Methods in Statistics II (3). Prerequisite: STA 5106 or instructor permission. Matlab and a programming language (C/Fortran) will be used. A continuation of STA 5106 in computational techniques for linear and nonlinear statistics. Statistical image understanding, elements of pattern theory, simulated annealing, Metropolis-Hastings algorithm, 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, 2122, 2171, 3014, 3032, or QMB 3200.

STA 5166. Statistics in Applications I (3). Prerequisite: MAC 2313. 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. 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. 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). Prerequisites: STA 4442 or 5440. 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 5206. Analysis of Variance and Design of Experiments (3). Prerequisite: One of STA 2122, 4322, or 5126. Graduate credit for non-statistics majors only. One and two-way classifications, nesting, blocking, multiple comparisons, incomplete designs, variance components, factorial designs, confounding.

STA 5207. Applied Regression Methods (3). Prerequisite: One of STA 2122, 4322, or 5126. Graduate credit for non-statistics majors only. General linear hypothesis, analysis of covariance, multiple correlation and regression, response surface methods.

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. Simple, stratified, systematic, and cluster random sampling. Ratio and regression estimation. Multistage sampling.

STA 5238. Applied Logistic Regression (3). Prerequisite: STA 2171. This course is an applied introduction to logistic regression, one of the most commonly used analytic tools in biomedical 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. 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 5440 and either MAC 2313 or STA 5326. Sufficiency, point estimation, confidence intervals, hypothesis testing, regression, linear models, Bayesian models.

STA 5326. Distribution Theory and Inference (3). Prerequisite: MAC 2313; at least one previous course in statistics or probability. Introduction to probability, random variables, distributions, limit laws, conditional distributions, and expectations.

STA 5327. Statistical Inference (3). Prerequisites: STA 5326, 5446. Statistical inference viewed at a measure-theoretic level.

STA 5334. Limit Theory of Statistics (3). Prerequisite: STA 5327. 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. Random variables, probability of random variables, generating functions, central limit theorem, laws of large numbers.

STA 5446. Probability and Measure (3). Prerequisites: MAA 4227, 5307, or the equivalent. 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, STA 5446.

STA 5507. Applied Nonparametric Statistics (3). Prerequisite: A course in statistics above STA 1013 or instructor permission. 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 5126. Statistics for quality control and productivity; graphical methods; control charts; design and experiment for product and process improvement.

STA 5676. Reliability Theory and Life Testing (4). Prerequisite: A basic course in probability and statistics.

STA 5707. Applied Multivariate Analysis (3). Prerequisite: One of STA 5167, 5207, or 5327. Inference about mean vectors and covariance matrices, canonical correlation, principal components, discriminant analysis, cluster analysis, computer techniques.

STA 5746. Multivariate Analysis (3). Prerequisite: STA 5327.

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. 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.

STA 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.

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 5938. Topics in Medical Consulting (3). Prerequisite: STA 2171. This is a "hands-on" course in consulting. Two to four reasonably complex problems are identified each time the course is offered, the investigators present the problem to the class. Statistical topics covered in class are those identified by the class as required to solve the problems presented.

STA 5939. Introduction to Statistical Consulting (3). (S/U grade only.) Prerequisite: STA 5167 or 5327. Formulation of statistical problems from client information; the analysis of complex data sets by computer; 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 hours may apply to the master's degree.

STA 6174r. Advanced Methods in Epidemiology (3). Prerequisites: STA 5167, 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. The 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 stochastic 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. The 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 6466. Advanced Probability (3). Prerequisite: STA 5447.

STA 6468r. Advanced Topics in Probability and Statistics (2-3). May be repeated to a maximum of twelve semester hours.

STA 6555. Nonparametric Curve Estimation (3). Prerequisite: STA 5327 or instructor permission. Estimation of regression and density functions and their derivatives where no parametric model is assumed. Kernel, local polynomial, spline and wavelet methods. Emphasis on analysis and applications of the smoothing techniques and data-based smoothing parameter selectors.

STA 6709. Spatial Statistics (3). Prerequisites: STA 5208, 5327; familiarity with S-Plus or SAS software. Methods for the analysis of spatial data, including geostatistical data, lattice data and point patterns. 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 8966. Master's Comprehensive 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 Middle and Secondary Education**

School of TEACHER EDUCATION

COLLEGE OF EDUCATION

Web Page: <http://www.coe.fsu.edu/ste/>

Assistant Dean and Director: Lawrence Scharmann; **Professors:** Carroll, Foorman, Hanline, Lewis, Southerland; **Associate Professors:** N. Davis, Edwards, Gallard, Guerette, Haneda, Jakubowski, I. Jones, Menchetti, Ratliffe, Rice, Scherff, Shaw (Panama City); **Assistant Professors:** Clark, Galeano, Kim, Sampson, Wanzek, Witte; **Associates in Elementary Education:** Fesmire (Panama City), Fiske-Davis, Rios (Panama City); **Research Associate:** K. Davis (Panama City); **Assistant in English Education:** Spradlin; **Assistant in Social Studies Education:** White; **Assistant in Elementary Education:** Daniel; **Associate in Elementary Education:** Underwood; **Assistants in Foreign and Second Language Education:** Ballard, Torres; **Associate in Education for Students w/Exceptionalities:** Presnell; **Professors Emeriti:** Aspinwall, Clark, Dawson, Denmark, English, Flake, Green, G. Jones, Kirby, Lynch-Brown, Mills, Oseroff, Palmer, Piazza, Platt, Schluck, Scott, Scott-Simmons, Simmons, Sutherland, Tait, Wheatley

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 following programs and degree levels are offered by the School of Teacher Education:

Special Education

Special Education M,S,D

Special Education Studies M (online and distance-learning students only)

Exceptional Student Education (main campus students only) B/M combined

Visual Disabilities M

Early Childhood Education M,S,D

Elementary Education M,S,D

Reading Education/Language Arts M,S,D

English Education M,S,D

Mathematics Education M,D (suspended)

Science Education M,D (suspended)

Social Science Education M

Master of the Science of Teaching, MoST Program

Foreign and Second Language Teaching M

English Teaching M

Mathematics Teaching M

Social Science Teaching M

Certificate in Blended Online Learning and Teaching (BOLT)

Certificate in Early Childhood and Family Intervention

Certificate in Early Childhood Special Education

Infant/Toddler Developmental Specialist Certificate

TESOL Certificate Program

Master of the Science of Teaching: MoST Program

Those who have a baccalaureate degree in a non-education major may earn a master's degree in teacher education and Florida Department of Education-

approved initial certification, concurrently in these areas: English Teaching, Foreign and Second Language Teaching, Mathematics Teaching, and Social Sciences Teaching. Please contact the School of Teacher Education for information on the MoST Program.

EARLY CHILDHOOD EDUCATION

Web Page: <http://www.coe.fsu.edu/earlychildhood>

The Early Childhood Education Program offers graduate programs leading to master's, specialist, and doctoral degrees. The master's program is designed for persons aspiring to be master classroom teachers of children, birth to grade three (or age eight) in public and private schools, early childhood centers, or similar educational institutions.

The specialist in education and doctor of philosophy degree programs are designed to prepare persons 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.

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. A minor is suggested in the areas of psychology, sociology, anthropology, child development, or related fields.

Master's Degree

Admissions

Admission to the master's program is based upon the applicant's previous academic performance, aptitude for graduate study, and professional experience in the field or related field. However, applicants will not automatically be accepted based on any single criterion; the faculty committee will consider evidence of the following: 1) a baccalaureate degree from an approved institution; 2) submission of a transcript including a grade point average of 3.0 or better in the last two years of undergraduate study; 3) submission of a minimum combined verbal and quantitative score of 1000 on the Graduate Record Examination (GRE); and 4) three letters of recommendation. International applicants must also produce a score of 80 on the Internet-based Test of English as a Foreign Language (TOEFL) or an equivalent score on an alternate TOEFL format.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Specialist Degree

Admissions

Requirements for entrance to the specialist degree program are: 1) a master's degree from an accredited university; 2) GPA of 3.0 or better in the master's degree coursework and a minimum score of 1000 on the combined (verbal and quantitative) aptitude portions of the GRE (except where additional criteria are otherwise specified by the program); 3) professional experience in the field or related field; 4) three letters of recommendation; and 5) a statement of professional objectives.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Doctoral Degree

Admissions

Requirements for entrance to the doctoral degree program are: 1) a master's degree from an accredited university; 2) GPA of 3.0 or better in the master's degree coursework and a minimum score of 1000 on the combined (verbal and quantitative) aptitude portions of the GRE; 3) professional experience in the field or related field; 4) three letters of recommendation; 5) a statement of professional objectives; and 6) a formal research-based paper.

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Individualized programs of study are designed to incorporate courses that will be consistent with career goals and skill levels of students. Persons interested in graduate study should write to the coordinator of Early Childhood Education in the School of Teacher Education.

Definition of Prefixes

EDG—Education: General

EEC—Education: Early Childhood

Graduate Courses

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 5246. Moral Education (3). This course is designed for master's and doctoral students to expose and discuss controversial topics related to moral education. Course topics include hate crimes, racial issues, gun control, character-values-moral education, and tolerance. This class examines historical, theoretical, and practical issues and applications pertaining to moral education.

EEC 5263. Thematic Curriculum and Direct Instruction for Young Children (3). 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. This course focuses on thematic curriculum and direct instruction.

EEC 5269. Curriculum and Play for Young Children (3). 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. This course focuses on active learning through play.

EEC 5305. Methods and Experiences with Young Children and Families (3). 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). Effects of parental involvement on children's educational development and achievements; designing/implementing strategies for enhancing parent-teacher partnership in education.

EEC 5525. Children's Centers (3). Investigate the basic principles involved in establishing and operating centers for the young child.

EEC 5605. Techniques of Classroom Management and Child Study (3). 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). 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). 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 (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 5973r. Specialist in Education Thesis (1–6). (S/U grade only.)

EEC 6516. Educational Environments for Infants and Toddlers (3). Updates research in first years of life to kinds of environment and learning experiences which promote and ensure optimum development.

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.)

Note: Courses are subject to modification.

ELEMENTARY EDUCATION

Web Page: <http://www.coe.fsu.edu/elementaryed>

The primary goal of Elementary Education 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. In addition to main campus offerings, courses leading to the Master of Science (MS) degrees may be taken at the Panama City campus.

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. One graduate faculty member resides at the Panama City campus. The program also draws on other faculty in the College and University from the disciplines of anthropology, philosophy, psychology, sociology, and the humanities.

Master's Degree

The Master of Science (MS) degree in Elementary Education is designed for individuals aspiring to be master classroom teachers for elementary and middle school grades, curriculum leaders of schools and districts, or educational consultants. Initial certification for grades K–6 may be obtained by college graduates with majors in other fields as part of an extended master's degree program. 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.

Admission

Admission to the Master of Science (MS) program is based upon the applicant's previous academic performance, aptitude for graduate study, and teaching certification held; teaching experience is desirable. However, applicants will not automatically be accepted based on any single criterion; the faculty committee will consider evidence of the following: 1) a baccalaureate degree from an approved institution; 2) submission of a transcript including a grade point average of 3.0 or better in the last two years of undergraduate study; 3) submission of a minimum combined verbal and quantitative score of 1000 on the Graduate Record Examination (GRE); 4) certification in a field of education; and 5) successful teaching experience. International applicants must also produce a score of 80 on the Internet-based Test of English as a Foreign Language (TOEFL) or an equivalent score on an alternate TOEFL format.

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Curricula

Two types of programs are offered: 1) For students who are already certified in elementary education, thirty-two to thirty-three semester hours and a comprehensive exam or thesis are required. Coursework includes a **minimum** of nine semester hours in elementary curriculum, teaching, and learning; twenty-one to twenty-two semester hours in content specializations with at least nine hours in a focal area; and three semester hours in educational foundations. Students may write a thesis that will substitute for up to six semester hours of coursework; 2) For students seeking initial certification in elementary education, an extended degree program of fifty-one to fifty-two semester hours, currently including ten semester hours of supervised teaching and internship, is offered. To complete this program, students must also be admitted to teacher education, described in the "College of Education" chapter of this *Graduate Bulletin*.

Specialist Degree

The Specialist in Elementary Education (EdS) 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.

Admission

Requirements for entrance to the specialist degree program are: 1) a master's degree from an accredited university; 2) GPA of 3.0 or better in the master's degree coursework, and a minimum score of 1000 on the combined (verbal and quantitative) aptitude portions of the GRE; and 3) a minimum of two years teaching experience at the elementary or middle school level. The applicant must submit a statement of professional objectives and a GRE score as part of the application process. Prior certification in elementary education is required.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Curricula

For the specialist degree, a thirty-two semester hour program of studies is individually designed by each student's committee based on the curricular needs and career focus of the 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 elementary education emphasizes theory and research in elementary education drawn from the disciplines of anthropology, sociology, philosophy, psychology, and the humanities. The doctorate in elementary education prepares 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 program 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.

Admission

Applicants are selected on the basis of the following minimum requirements: 1) a master's degree from an accredited university; 2) a GPA of 3.0 or better in coursework for the master's degree, and a minimum score of 1000 on the combined (verbal and quantitative) aptitude portions of the GRE; 3) a minimum of three years of professional experience in elementary education; 4) three letters of recommendation; 5) a statement of professional objectives and a writing sample; and 6) an interview with faculty in elementary education. All applicants must submit a GRE score as part of the admission process.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Curricula

The program of study leading to a Doctor of Philosophy 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

CGS—Computer General Studies

EDE—Education: Elementary

EDS—Education: Supervision

MAE—Mathematics Education

SCE—Science Education

SSE—Social Studies Education

Graduate Courses

CGS 5112. Using Computer Graphics as an Instructional Tool (3). Prerequisites: CGS 2160, MAS 2103. Corequisite: COP 3001 or instructor permission. Designed to help teachers of mathematics make a more effective use of computer graphics in their teaching of mathematics. Topics in construction of three dimensional graphics and computer aided design are included. Particular attention will be given to visualization.

CGS 5113. Using Computer Simulation as an Instructional Tool (3). Prerequisite: CGS 5112 or instructor permission. Designed to help teachers of mathematics use computer simulation as an effective instructional tool in the teaching of mathematics. Particular attention will be given to microworlds.

EDE 5225. The Elementary School, K-6 (3). 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). 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). May be repeated to a maximum of nine semester hours. Designed for students to perform a critical analysis of a number of issues and trends important to the public elementary school.

EDE 5324. Promoting Thinking in the Elementary School (3). 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. Designed to help professional teachers use technology for the development of higher-order thinking. Emphasis will be given to current trends and issues in technology, such as Hypermedia and Internet. Teachers will 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). 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). 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 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.) 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. 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.)

EDS 5356. Supervision of Associate Teaching (3). (S/U grade only.) Function of public schools in teacher education programs, basic knowledge and skills needed by classroom teachers to become effective supervising teachers. Emphasis given to the Florida Performance Measurement System/Beginning Teacher Program. Practical laboratory experience included.

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.

MAE 5655. Computers in Mathematics Education (3). Prerequisites: CGS 2160 and six semester hours of 2000-level or above mathematics. A study of methods and techniques for using the computer in mathematics education and/or precollege mathematics classroom instruction.

SCE 5215. Conceptual Learning in Elementary School Science (3). 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). The identification of problems, their investigation, and application of findings to instruction.

Note: Courses are subject to modification.

READING AND LANGUAGE ARTS

Web Page: <http://www.coe.fsu.edu/reading>

The primary goal of reading education and language arts is to prepare professionals to work at various levels of instruction, early reading and writ-

ing 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.

Graduate Curricula

Reading Education and Language Arts is a graduate program offering three degrees: 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.

Admission

Admission to the Master of Science (MS) program is based upon the applicant's previous academic performance, aptitude for graduate study, and teaching certification held; teaching experience is desirable. However, applicants will not automatically be accepted based on any single criterion; the faculty committee will consider evidence of the following: 1) a baccalaureate degree from an approved institution; 2) a grade point average of 3.0 or better in the last two years of undergraduate study, and a minimum combined verbal and quantitative score of 1000 on the Graduate Record Examination (GRE); 3) certification in a field of education; and 4) successful teaching experience. International applicants must also produce a score of 80 on the Internet-based Test of English as a Foreign Language (TOEFL) or an equivalent score on an alternate TOEFL format.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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.

Specialist Degree

The specialist degree is designed to meet advanced certification requirements and to prepare individuals for leadership roles in reading and language arts programs. Students who pursue a specialist degree 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.

Admission

Requirements for entrance to the specialist degree are: 1) a master's degree from an accredited university; 2) a GPA of 3.5 or better in the master's degree coursework, or a minimum score of 1000 on the combined aptitude portions of the GRE; and 3) a minimum of two years teaching experience or related professional experience. The applicant must submit a statement of professional objectives and a GRE score as part of the application process. Prior certification in a field of education is required.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Curricula

The program of study leading to the specialist in education degree 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 reading education emphasizes scholarly work in theoretical disciplines such as psychology, linguistics, so-

ciology, 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.

Admission

Applicants must provide evidence of: 1) a master's degree from an accredited university; 2) a 3.5 GPA or better in the master's degree coursework, and a minimum score of 1000 on the combined aptitude portions of the GRE; and 3) a minimum of three years of professional experience in the field or a related field. Additionally, applicants must submit a vita, a statement of professional objectives, writing samples, a GRE score, and three letters of professional recommendation. An interview with the reading and language arts faculty is also required.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Curricula

The program of study leading to the Doctor of Philosophy degree 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). Observation, instruction, and evaluation of oral and written language in the elementary language arts classroom.

LAE 5349. Language and Literacy Development through Storytelling/Storywriting (3). Course covers the theoretical underpinnings related to the storytelling process and educational benefits of storytelling/storywriting. Course focuses on storytelling as an excellent vehicle for promoting and integrating the language processes of listening, speaking, reading, and writing in the classroom setting. Digital storytelling (technology integration) strategies will be included.

LAE 5415. Investigation in Children's Literature (3). 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). 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). The purpose of this course is to overview the contributions of multiple disciplines to the study of language, literacy, and schooling.

LAE 5931r. Special Topics in Elementary Language and Literature (1–3). Provides examination of in-depth issues related to elementary education curriculum in language and literature. May be repeated to a maximum of nine semester hours.

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). 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 will locate, access, read, evaluate, and develop strategies to use multicultural literature and other resources to meet information needs of children and young adults.

LIS 5567. International Literature for Children and Young Adults (3). 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). A review of 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. Supervision and Instruction in Secondary School Reading (3). Application of the reading process to the secondary school curriculum. Diagnostic procedures and instructional strategies useful in developing school reading programs.

RED 5385. Teaching Reading to Adult Illiterates (3). Application of the reading process to ABE curriculum. Provides practitioners, administrators, and researchers with theoretical knowledge related to whole language and literacy education. Practicum included.

RED 5546. Diagnosis of Reading Disabilities (3). Prerequisite: RED 5147 is recommended. 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 5147. 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 5147. 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). A practicum 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 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 will be 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. Development of 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 (1–3). (S/U grade only.) Provides doctoral students with knowledge and awareness of the professional environment within which they will practice. The resources of the University, professional organizations, professional skills such as grantsmanship and publication, and trends and issues in the field will be considered. May be repeated to a maximum of nine 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.)

Note: Courses are subject to modification.

SPECIAL EDUCATION

Web Page: <http://www.coe.fsu.edu/special-ed>

The purpose of the Special Education graduate program 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 Studies (for distance-learning students), Exceptional Student Education (for initial certification students; three-year Jr/Sr/MS program), and Visual Disabilities; an education specialist (EdS) degree; and a PhD in Special Education.

Master's Degree Programs in Special Education

Education of Students with Exceptionalities

This major is a three-year program that starts with the undergraduate junior year and culminates at the end of the third year with the conferral of a bachelor's and master's degree with initial Florida DOE certification in K-12 Exceptional Student Education with ESOL endorsement. For details, refer to the *General Bulletin*. Students in the ESE program select a specialization area from the following: autism spectrum disorders, early childhood special education, high incidence disabilities/response to intervention, severe/profound disabilities, or transition/community inclusion.

Special Education—MS Degree

The Master of Science 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 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, high incidence disabilities/response to intervention, severe/profound disabilities, or transition/community inclusion; and choose between a thesis or non-thesis track within the specialization.

Special Education Studies—MS Distance Learning Degree

The Master of Science in Special Education Studies 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 of any state. The program is a minimum of thirty-three semester hours and provides for specialization in early childhood special education, severe disabilities, and high incidence disabilities. All coursework is completed online.

Visual Disabilities

This program is designed as a leadership program with emphasis in three areas of specialization. These are: classroom teaching, orientation and mobility, and rehabilitation teaching of adults who are blind. Applicants who do not have an undergraduate degree in visual disabilities or do not hold Florida teacher certification in visual disabilities but plan to work with children must take prerequisites that are essential to the understanding of the field. In addition to coursework, the student is required to have practical experiences. The program of study and the length of the program is based upon the applicant's prior academic preparation and interests.

Admission Requirements for Special Education

Applicants must meet University and College of Education admission requirements, submit three letters of recommendation, and be interviewed by program faculty.

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 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. Degree requirements for the EdS are described in detail in the "College of Education" chapter of this *Graduate Bulletin*.

Doctoral Programs in Special Education

The doctoral program (PhD) in Special Education is a comprehensive program designed to prepare selected individuals to serve in leadership roles in the education of individuals with disabilities. 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

EBD—Education: Emotional/Behavioral Disorders

EEX—Education: Exceptional Child-Core Competencies

ELD—Education: Specific Learning Disabilities

EMR—Education: Mental Retardation

EVI—Education: Visually Impaired-Blind

IDS—Interdisciplinary Studies

Graduate Courses

EBD 5223. Advanced Study of Emotional Disturbance (3). This course covers the theoretical and practical issues and instructional strategies for the emotionally disturbed.

EBD 5320. Precision Teaching Methods for Emotional Disturbances (3). This course covers techniques for using direct, daily, and continuous measurement in the assessment and instruction of youth with academic and emotional/behavioral problems.

EBD 5941. Practicum in Emotional Disturbance/Learning Disability (3). This course provides observation and participation with LD/ED children in public and private settings.

EEX 5017. Typical and Atypical Early Development (3). Focuses on typical and atypical development in the early years.

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.

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 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 Disabilities (3). This course provides participants with the knowledge necessary to understand the effects of severe disabilities (severe/profound disabilities, autism, dual sensory impairments) on development and learning and the skills needed to assess individuals with severe disabilities.

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 in keeping with the Individuals with Disabilities Education Act of 1997.

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 5285r. Seminar in Transition (3). Addresses the range of postsecondary education, transitional services, employment training programs and community living and recreation. Available to adults with disabilities. May be repeated to a maximum of six semester hours.

EEX 5286. Preparing Individuals for Transition (3). Planning and implementing appropriate transitional services for youths with disabilities in the public schools.

EEX 5298. Teaching Students with Autism (3). This course provides class participants with the knowledge needed to develop effective communication, social, and language assessment and intervention for individuals with autism spectrum disorder.

EEX 5456. Program Development for Young Children with Disabilities (3). Focuses on issues related to providing comprehensive services to young children with disabilities.

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 5740. Cognitive and Social Implications of Maltreatment of Students with Exceptional Needs (3). This course focuses on the topic of child maltreatment and its impact on students with disabilities.

EEX 5765. Introduction to Special Education Technology (3). This course introduces the way technology (specifically computers) is used with special education students.

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 5836. Practicum with Students with Autism Spectrum Disorder (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 semester hours.

EEX 5841r. Field Laboratory Internship (1-12). (S/U grade only.) 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). Investigation of a variety of topics in special education. May be repeated to a maximum of nine semester hours.

EEX 6935r. Doctoral Seminar in Special Topics (1-3). (S/U grade only.) Investigation of a variety of topics in special education. May be repeated to a maximum of nine semester hours.

EEX 5940r. Practicum in Early Childhood Special Education (3). 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). 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 of credit is required.

EEX 5973r. Specialist in Education Thesis (1-6). (S/U grade only.) A minimum of six semester hours credit is required.

EEX 6301r. Seminar: Research Problems in Special Education (1). (S/U grade only.) A seminar focusing 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). Analysis and synthesis of research areas relating to exceptional individuals.

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 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

EEX 8985r. Dissertation Defense (0). (P/F grade only.)

ELD 5140. Advanced Study of Learning Disabilities (3). Comparison of strategies, methods, and materials for teaching LD students and their philosophical bases are studied. Particular attention is given to various applied and theoretical models.

EMR 5235. Teaching the Student with Profound Disabilities (3). Knowledge and skills to implement and evaluate intervention for students with profound disabilities.

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.

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). Skills and knowledge to teach deaf-blind/multisensory impaired individuals.

EVI 5221. Applied Methods of Orientation and Mobility (3). Prerequisites: EVI 4220, EVI 4121, 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 4220, EVI 4121, 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). Prerequisites: Permission of instructor. 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 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 5315. Teaching Communication Skills to Visually Impaired Adults (3). This course has a threefold purpose. Students will develop skills in reading, writing and teaching Braille to adults. Students will 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. The purpose of this course is to prepare 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 5318. Special Methods of Working with Preschoolers with Visual Impairments (3). Prerequisites: EVI 4011, 4121. Participants in this course 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: Permission of instructor. 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 will include lecture, demonstration, peer-teaching and hands-on activities.

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). Prerequisites: Permission of instructor. 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). The purpose of this course is to examine 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 5931r. Seminar in Visual Disabilities (3). 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). (S/U grade only.) Prerequisite: EVI 4230 or equivalent. 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). Prerequisite: EVI 4220, 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 Deafblind (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).

IDS 5347. Infant and Toddler Typical and Atypical Development (3). This course provides participants with knowledge of typical and atypical development from birth to 3 years of age, with particular attention paid to the impact of disabilities and risk factors on development.

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.

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.

Note: Courses are subject to modification.

ENGLISH EDUCATION

Web Page: <http://www.coe.fsu.edu/english-ed>

The graduate program in English Education has been in existence since 1952 and has produced numerous national leaders in research, teacher training, and service. All programs emphasize a strong disciplinary foundation in literature, language, and composition, as well as specialized coursework in the teaching of English. The master's degree also allows for an emphasis in a) in-service teacher development; b) National Board Certification (for experienced teachers); or c) community college instruction.

The graduate faculty works in close and long-standing cooperation with colleagues in the English Department as well as other programs in the College of Education and throughout the University toward the development of the graduate program. Master's, specialist, and doctoral advisory committees typically include professors from the School of Teacher Education and the English Department.

English Education faculty members are researchers as well as teacher educators and have made significant contributions to the theory and practice of English teaching, with particular attention to the teaching of literature, reading, written composition, whole language theory and practice, technology for English classrooms, and young adult literature.

Graduates of the English Education Program are candidates for positions as college professors and instructors, junior college instructors, secondary teachers, researchers, curriculum planners, supervisors, writers and editors, and consultants.

Master's Degree

The traditional master's degree in Secondary English Education requires thirty-three semester hours of coursework. Twelve to fifteen hours in English Education, including LAE 5064, 5736, 5637, and 5932 or an approved course alternate; from fifteen to twenty-one hours will be in English (literature, rhetoric, or writing); and up to six semester hours in a collateral field. Decisions regarding the appropriate choice of courses will be determined in part by the graduate student's undergraduate coursework and work experiences, as well as his or her goals. Experienced teachers may choose the track that emphasizes work toward National Board Certification. A student who is an experienced teacher may elect to write a thesis in lieu of three to six hours of coursework. All candidates take a comprehensive examination and/or complete an electronic portfolio at the completion of the coursework. Each candidate's work is supervised by a three-person committee, including one member from the English Department or from the area of emphasis. Students must identify the members of their committee and complete a program of studies form no later than the second semester of coursework.

Basic requirements for entrance to the master's degree program are 1) a grade point average (GPA) of 3.0 or better during the last two years of undergraduate work, 2) a score of 1000 on the combined aptitude portions of the Graduate Record Examinations (GRE), 3) submission of an acceptable sample of academic writing, and 4) completion of a minimum of twenty-one semester hours of undergraduate coursework in English, not including freshman composition. State regulations require every graduate degree candidate to submit a GRE score, even if one's GPA qualifies one for admission to the program. A GRE score is also required for most financial aid. Up to six semester hours of credit may be transferred from another institution. Applicants must submit a sample of academic writing, (three letters of recommendation, a letter of intent, an FSU application, and copies of all official transcripts) to Admissions Committee, English Education, G107 STB, FSU, Tallahassee, FL 32306. International applicants must also produce a score of 80 on the Internet-based Test of English as a Foreign Language (TOEFL) or an equivalent score on an alternate TOEFL format.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Teacher Certification at the Graduate Level. Liberal arts graduates with a major in English may seek teacher certification in secondary English (grades 6–12) while completing the master of science in teaching (MoST) track degree. Students who enter the graduate program without teacher certification will be placed in the master of science in teaching (MoST) track. These students will need to complete the Florida Teacher Certification Exam (three sections) before completing the program and will be required to complete a student teaching internship at a local middle or high school in their final semester of coursework. In order to be eligible for certification or licensure by the Florida DOE, graduates of the master's program must have completed the appropriate certification coursework and must have fulfilled the entirety of the initial certification requirements set out in the College of Education section of this Graduate Bulletin.

Specialist Program

The specialist in education degree 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 doctoral degree 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. A GRE score must be submitted. A GPA of at least 3.0 and a GRE score of at least 1000 will be required, as will an acceptable sample of academic writing.

Note: Effective August 2011, the GRE Revised General Test replaced the GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

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 adviser, 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 Prefix

LAE—Language Arts and English Education

Graduate Courses

LAE 5064. Reader Response to Literature: Research and Practice (3). 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). The 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 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 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 taken for credit for a total of 6 (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 Secondary English Curriculum (3–6). History of English as a school subject; current developments, issues, and research in the teaching of English. May be repeated to a maximum of six semester hours.

LAE 5736. Written Composition in the Secondary School: Theory and Research (3). 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). The 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). The 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 5867. Enhancing Teaching Through Technology (3). Prerequisite: EME 2040 or equivalent. This course surveys the issues and uses of technology to improve the teaching and achievement of students in the classroom. Course includes the most current instructional technology methods available to teachers.

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). Investigations 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 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.)

Note: Courses are subject to modification.

FOREIGN AND SECOND LANGUAGE TEACHING

Web Page: <http://www.coe.fsu.edu/Academic-Programs/>

*Departments/School-of-Teacher-Education-STE/Degree-Programs/
 Master-of-Science-in-Teaching-MOST/Multilingual-Multicultural/
 ESOL-and-Foreign-Language-Education*

Curricula in Foreign and Second Language Teaching lead to the Master of Science (MS) Degree. Applicants are expected to hold a 3.0 upper-division baccalaureate grade point average and provide a combined score of 1000 or better on the verbal and quantitative aptitude portions of Graduate Record Exam, with neither individual section score less than 400. International applicants must also provide evidence of a passing TOEFL score: 80 on the internet-based test and 550 on the paper-based version. In addition, an applicant must take and pass the General Knowledge portion of the Florida Teacher Certification exam if he or she does not earn 1000 on the combined GRE or enters the program without an active Florida Professional Certificate (educator's license). Upon graduation/certification, students will be required to provide passing scores on the relevant subject-area portion of the FTCE if already holding a Professional Certificate, or all three portions (to include subject area and professional knowledge) of the FTCE in order to be certified.

Native English-speaking (US domestic) applicants shall hold an earned baccalaureate degree with a major field in a language discipline offered by the Department of Modern Languages & Linguistics. Non-major applicants with less than twenty college credits (with at least twelve hours at the 3000 level) in the relevant language (conversation, reading, composition, or translation; culture-only courses do not qualify) will not be considered. International applicants (with a native language other than English) shall be admitted on the basis of their proficiency in the native language as long as that language is offered by the Department of Modern Languages.

Note: Effective August 2011, the GRE Revised General Test replaced the current GRE General Test. To learn more about this new test, go to <http://www.ets.org/gre>.

Program Design and Requirements

The thirty-seven-hour master's program is sequenced over one calendar year. The major offers two tracks: one in Foreign Language Education (FLE) and one in English to Speakers of Other Languages (ESOL). Both tracks share a common core of courses with other initial teacher certification programs within the School of Teacher Education. 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.

Area I (core courses) for the major are comprised of those courses required by the Florida DOE for initial teacher certification. Area II courses consist of pedagogy courses specific to the subject area, including courses in Methods for Teaching Foreign and Second Languages, and a six-hour graduate internship in Foreign or Second Language Teaching. Area III courses differ according to the specific track chosen by the student.

Within the Foreign Language track students will take a course in Applied Linguistics (three hours) plus nine hours of graduate courses in the literature or culture of the language they plan to teach. These courses are offered by the Department of Modern Languages. Modern Languages offers courses in Arabic [FOL, FOW], Chinese [CHI], French [FRE, FRW, FRT], German [GER, GEW, GET], Italian [ITA, ITW], Japanese [JPN], Portuguese [POR, POW], Russian [RUS, RUW, RUT], and Spanish [SPN, SPW]. The DOE offers teacher certification in all of these subject areas; therefore a student with a background in any of these areas would be eligible to complete the Master's in foreign language teaching. Within the ESOL track, students also take the Applied Linguistics class plus nine additional hours in the following second language teaching courses: Curriculum & Materials Design for Foreign & Second Language Teaching, Language Testing & Evaluation, and Sociolinguistics. These additional nine hours are offered by the School of Teacher Education. Graduation from the program also requires successful completion of a Master Teaching Portfolio (must register for Comps) in the final semester.

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

Advanced Undergraduate Courses

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.

Graduate Courses

EAP 5860r. Advanced English Practice for International Educators (3). (S/U grade only.) An orally based individualized course in English as a second language, designed to provide practice in diagnosed problem areas.

FLE 5908r. Directed Individual Study (1–3). (S/U grade only.) May be repeated to a maximum of twelve semester hours.

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 5706. Psycholinguistic Perspectives on Language Acquisition and Development (3). This course more deeply explores research issues and theories in language processing and acquisition with special emphasis on second language phenomena. Special topics are provided for students to investigate individually and in small groups.

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.

LIN 5932r. Topics in Linguistics (3). Different topics are selected to suit the needs and interests of students. A special effort will be made to select topics related to current theoretical and practical issues.

TSL 5005. Methodologies for Teaching Foreign and Second Languages (4). This course is designed to meet the needs of those teaching second languages abroad and pre-service teachers in K-12 foreign/second language education by developing an understanding of current theories of language learning through exploration of relevant research. Opportunities are provided for students to use the theoretical base in the design of classroom lessons.

TSL 5142. Development of Foreign/Second Language Curriculum and Materials (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 addresses the major areas of linguistics including phonology, morphology, syntax, semantics, acquisition, language socialization and variation. Students are expected to relate these to cross-linguistic issues in classrooms and provide ways to assist L2 learners in reading and language arts.

TSL 5325. English to Speakers of Other Languages (ESOL) Instruction in the Content Areas (3). The 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 5377. Reading in Foreign Language Instruction (3). Against a backdrop of current theories, issues, and research in first and second language reading, 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.

TSL5440. 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 non-traditional 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 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). Prerequisite: TSL 5005. 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 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.)

TSL 5974r. Specialist in Education Thesis (1-6). (S/U grade only.)

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 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 8978r. Specialist in Education Thesis Defense (0). (P/F grade only.)

TSL 8985r. Dissertation Defense (0). (P/F grade only.)

Note: Courses are subject to modification.

MATHEMATICS TEACHING

Web Page: <http://www.coe.fsu.edu/most>

Teacher Certification at the Graduate Level. Liberal arts graduates with a major in Mathematics may seek teacher certification while completing the master of science in teaching (MoST) track degree. Students will need to complete the Florida Teacher Certification Exam (three sections) before completing the program and will be required to complete a student teaching internship at a local middle or high school in their final semester of coursework. In order to be eligible for certification or licensure by the Florida DOE, graduates of the master's program must have completed the appropriate certification coursework and must have fulfilled the entirety of the initial certification requirements set out in the "College of Education" chapter of this *Graduate Bulletin*.

Programs of study for students majoring in Mathematics Teaching include fifteen hours of professional content (EDG 5208, EDF 5431, EDF 5935, TSL 5325, and RED 5337), fifteen hours of mathematics education and/or mathematics, and eight hours of field-based experiences including a fifteen-week internship in a middle or high school classroom.

Definition of Prefixes

MAE—Mathematics Education

Graduate Courses

MAE 5146. School Mathematics Curriculum (3). Prerequisite: Instructor permission. 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; 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.) Minimum of six semester hours required.

MAE 5973r. Specialist in Education Thesis (1-6). (S/U grade only.) Minimum of six semester hours required.

MAE 6148. Curriculum in Mathematics Education (3). Prerequisite: Instructor permission. 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.)

Note: Courses are subject to modification.

SCIENCE EDUCATION

Curricula in science education lead to the Master of Science (MS), Specialist in Education (EdS), and Doctor of Philosophy (PhD) degrees.

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 examined the role of teacher's beliefs in changing teaching practice and alternative means of assessing student's learning. Graduate students may obtain teaching experience through involvement with science education at Florida State University's laboratory school.

Florida State University is a major site for curriculum development in science education. Advanced technology incorporating microcomputers and laboratory resources are used to prepare problem-solving materials for middle school learners. The focus of the program's research and development is on enhancing the quality of learning and teaching science.

Admission

New admissions to the Science Education graduate program were suspended at all degree levels effective July 1, 2009. No new applications can be considered at the present time. Currently enrolled graduate students must work under the close supervision of a faculty member with appropriate status in order to accommodate their individual needs.

Master's Degree

Curricula

To complete the master's degree, students must write a thesis or complete a specified portfolio and complete a minimum of thirty-three semester hours of coursework with a GPA of 3.0. The program of studies 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.

Students who wish to obtain teacher certification will be required to take additional hours and complete state requirements for initial certification.

Specialist in Education

Curricula

A minimum of thirty semester hours of coursework with a GPA of 3.0 and successful completion of a thesis or portfolio is required. The program of studies 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: science education, eighteen semester hours minimum; dissertation in science education, twenty-four semester hours minimum; research methods, twelve semester hours minimum; educational foundations, twelve semester hours minimum; science content, variable, nine 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 candidate defends it in an oral examination conducted by the supervisory committee. Students actively writing their dissertation must enroll for a minimum of three 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 listed here 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. Sample programs of study and additional information regarding the core courses may be obtained from the science education office, or by checking the science education homepage.

Florida Teacher Certification

Students pursuing the master's degree may simultaneously complete the requirements for teacher certification in Florida, if they choose to do so. The teacher certification program is distinct from the degree program. The courses in science education include courses in teaching and learning, curriculum and research, and must be completed, along with courses mandated by the legislature, and an appropriate supervised teaching internship and teaching practicum. The specific courses should be selected on the basis of the recommendations of science education faculty. The courses counted toward certification can be graduate and/or undergraduate courses from Florida State University or elsewhere. As the rules for certification are determined by the legislature and the Florida Department of Education they are subject to change. Curricular requirements are frequently revised to meet current DOE standards.

Definition of Prefix

SCE—Science Education

Graduate Courses

SCE 5140. Curriculum in Science Education (3). 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 5225. Conceptual Learning in Middle School Science (3). Provides opportunities to acquire knowledge and skills related to teaching and learning science in middle school grades. Investigates the emotional and psychological needs of adolescent pupils in relationship to the middle school science curriculum.

SCE 5331. Management and Planning in Science Teaching (3). Prerequisites: Admission to the program, SCE 5336, SCE 5340, SCE 5895, and SCE 5947. Corequisite: SCE 5942. This course provides support and guidance to science-education graduate students who are currently interning.

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 that Promote Learning in Science (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). Master's level. 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. This 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). A comprehensive survey of research methodology used in studying science education is conducted in this course. Students develop skills in interpreting both qualitative and quantitative studies, with particular emphasis placed on qualitative methodologies.

SCE 5745. Statistical Applications (3). This course provides science teachers with a basic understanding of statistical procedures used in educational research, scientific studies, and reform documents. The course focuses on producing and critiquing statistical-graphing displays and on applying statistical procedures to classroom teaching and school data to enhance the understanding of scientific and educational research.

SCE 5836C. Teaching Earth and Space Science (3). Includes traditional discipline categories of geology, meteorology, astronomy, and oceanography. Utilizes National Science Education standards to organize subject matter, which is the focus of this pedagogical course.

SCE 5895. Nature of Science and Science Teaching (3). This course allows students to examine the nature of scientific knowledge and how the particular actions involved in scientific inquiry influence the characteristics of 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.) 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 5945. Initial Practicum in the Teaching and Learning of Science (3). Corequisite: SCE 5336. This field-based course provides students with an opportunity to study the teaching and learning that takes place in an actual classroom.

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 5947. Final Practicum in the Teaching and Learning of Science (3). Prerequisites: SCE 5336 and SCE 5945. This field-based course provides students with an opportunity to study the teaching and learning that takes place in an actual classroom.

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. 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). To enable 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). 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). 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 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.) 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). 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.)

Note: Courses are subject to modification.

SOCIAL SCIENCE EDUCATION

Web Page: <http://www.coe.fsu.edu/socialscience-ed>

The faculty in Social Science Education is active in research, development, and teacher education. Research and development projects have been conducted with museums, school systems, ministries of education, federal and state agencies, private foundations, international organizations, and consortia of private and public groups, domestic and multinational. In teacher education, the faculty designs and conducts programs with school systems enhancing the development not only of beginning teachers but of new teacher educators to serve our profession.

Graduates are playing leadership roles in school systems throughout the United States and abroad, in community colleges and universities, and in state and national ministries of education. The achievements of program graduates reflect the increasing opportunities for well-trained social science education professionals in the public and private sectors of education at all levels. The curriculum is taught from a global perspective to meet teachers' challenges in the 21st century in preparing their students to become humanistic and competent critical thinkers in acquiring cross-cultural competence and globally-oriented citizenship in the age of globalization.

Students have two options to obtain a Master's Degree:

1. A post-certification master's degree in Social Science Education requiring either a comprehensive exam or a thesis for graduation.
2. A master's degree in Social Science Teaching (MoST) that requires a portfolio for graduation.

Master's Degree—Post Certification with Comprehensive Exam

The master's degree post-certification program is designed for classroom teachers (K through community college) who want to improve their competencies in social science instruction, for persons who want to gain special competency in social science education, and for persons who plan to proceed to educational specialist or doctoral studies. Candidates may pursue a thirty semester hour thesis type program or a non-thesis, thirty-two hour program. The intent is to provide the student with an increased depth of insight into the

social-behavioral sciences and the humanities as they relate to social education. The curricula provide the opportunity to study and reflect on problems of learning and instruction and important social issues. To make social science education relevant to the concerns of the youth and the major problems of today's society is a common goal of faculty and students. Considerable emphasis is given to social issues instruction and to direct experience in decision making. All curricula are flexible to meet the special interests and backgrounds of students.

For admission to the master's degree program, students must have a bachelor's degree in an appropriate field from an accredited institution, a minimum 3.0 GPA on a 4.0 scale for their last two academic years or a minimum score of 1000 on the GRE, and the approval of the graduate faculty. International applicants must produce a score of 80 on the Internet-based Test of English as a Foreign Language (TOEFL) or achieve an equivalent score on alternative formats.

This master's degree program is designed for those students who currently have a teaching certificate. Students have a choice of a thirty-three semester hour program or a thirty-nine hour thesis program. The thirty-three semester hour program requires that the student take a comprehensive examination during the last semester of coursework. This track of study requires fifteen semester hours of social science education (SSE) credits and eighteen semester hours of concentration in one of the social science teaching field specializations (American History/Economics/Government/World History). Only six semester hours of 4000 level coursework may be counted toward the degree. Only six semester hours may be transferred for the degree. Twenty-one semester hours must be taken with a letter grade. Only nine hours of non-degree seeking student credit can be used toward the degree.

Master's Degree-Post Certification with Thesis

For admission to the master's degree program, students must have a bachelor's degree in an appropriate field from an accredited institution, a minimum 3.0 GPA on a 4.0 scale for their last two academic years or a minimum score of 1000 on the GRE, and the approval of the graduate faculty. International students must produce a score of 80 on the Internet-based Test of English as a Foreign Language (TOEFL) or achieve an equivalent score on alternative formats.

The second track of study is a thirty-nine semester hour thesis-type program. This track requires fifteen semester hours of social science education (SSE) credits, eighteen semester hours of social science credits, and six thesis credit hours. The specified program for either track will be developed by the student with the assistance of a major professor.

For successful completion of the degree, students must have a minimum 3.0 GPA and perform satisfactorily on the thesis defense. Only six semester hours of 4000 level coursework may be counted toward the degree. Only six semester hours may be transferred for the degree. Twenty-one semester hours must be taken with a letter grade. Only nine hours of non-degree seeking student credit may be used toward the degree.

Master of Science in Social Science Teaching (MoST)

Liberal arts graduates with a major in the social sciences may seek teacher certification while completing the master of science in teaching (MoST) track. Students who enter the graduate program without teacher certification will be placed in this track. These students must complete the Florida Teacher Certification Exam (three sections) before completing the program and will be required to complete a student teaching internship at a local middle or high school in their final semester of coursework. In order to be eligible for certification or licensure by the Florida DOE, graduates of the master's program must have completed the appropriate certification coursework and must have fulfilled the entirety of the initial certification requirements set out in the "College of Education" chapter of this *Graduate Bulletin*.

The MoST program is designed for individuals who possess a BS degree in any academic area who wish to become certified classroom teachers of social studies education in grades 6-12. The program requires fifteen hours of core curriculum, twelve credit hours in subject-specific content and research, and twelve credit hours in pedagogy, including an internship in a school. A portfolio posted to Chalk and Wire is mandated to graduate from the program. The curricula are flexible to meet the special interests and backgrounds of students.

Admissions

All prospective students are required to take the verbal and quantitative aptitude tests of the GRE. Foreign students are required to take the Test of English as a Foreign Language (TOEFL) and present an acceptable score unless they have studied extensively in an English-speaking university or country. Both American and foreign students must submit three letters of recommendation, a statement of academic and professional goals, and records reporting previous academic achievement transcripts and GPA. Applicants are also encouraged to submit a resumé and copies of any articles, reports, or materials they may

have authored which are relevant to their application. In assessing eligibility for admission, the admissions committee takes into account these factors, as well as previous experiences.

Definition of Prefixes

EDF—Education: Foundations and Policy Studies

EDG—Education: General

SSE—Social Studies Education

Graduate Courses

EDF 5885. Education in the Arab World (3). Examines the development of Arab education focusing on curriculum and problems of learning and instruction. Patterns of language teaching and multiculturalism are carefully described and analyzed.

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 5892r. The Design of National Curricula in Developing Countries (3). Utilization of concepts and methods of the social and behavioral sciences in preparing a scheme for systematically revising a country's curriculum with attention to current problems. May be repeated to a maximum of nine semester hours.

EDF 5920r. Colloquium, Bilingual/Bicultural Education (1). Current topics and developments in multilingual/multicultural education. May be repeated to a maximum of nine semester hours.

EDF 5921r. Special Language and Culture Colloquium (2). Development of theories of curriculum, instruction, and evaluation for multilingual/multicultural education. May be repeated to a maximum of twelve semester hours.

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 6221. Curricular Theory (3). Theoretical concepts underlying significant curricular developments past and present; model development in curricular theory.

SSE 5144. Models of Teaching Social Studies (3). A graduate teaching methods course for middle school, junior high, and high school social science education.

SSE 5195. Developing a Global Perspective (3). The 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 5347r. Seminar: Contemporary Public Affairs and Trends for Teachers (3). Selected current social problems, their analysis, and implications for handling in teaching social science. May be repeated to a maximum of six semester hours.

SSE 5365r. Problems of Teaching Social Studies in Secondary School and Junior College (1-3). The identification of problems, their investigation, and application of findings to instruction. May be repeated to a maximum of six semester hours.

SSE 5366. Skill Development in Social Studies (3). Corequisites: SSE 5367, 5665.

SSE 5367. Fundamentals in Teaching Social Studies (3). Corequisites: SSE 5366, 5665. Rationale for social science instruction and an examination of traditional social science instructional methods.

SSE 5382. Seminar in Global and Multicultural Education (3). This course examines the similarities, differences, and perceived competing orientations of the historical developments of the global and multicultural-education movements in social-studies education since the second half of the 20th century. The course analyzes the rationale, purpose, goals, and implementation difficulties and controversies surrounding both fields, while offering conceptual frameworks and theories of global and multicultural education. Pre-service teachers enrolled in this course become conversant in seminal readings and contributions by leading scholars in global and multicultural education.

SSE 5386. Goals and Methods for the Teaching of History (3). 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). Corequisites: SSE 5366, 5367. Provides theory and practice in discovery, problem solving, and inquiry teaching of social science.

SSE 5675. Seminar in Civic Education (3). This seminar focuses on both historical and contemporary research pertaining to civic education. Students conduct research on civic education as it pertains to the teaching of history and the social sciences.

SSE 5676. The Effects of Globalization on Economy, Culture, and Geopolitics (3). This course covers the theories, concepts, and issues associated with globalization. Focused primarily on Macroeconomics, the course explores GDP, trade, markets, labor, and industrial structure; geopolitics, including a case-study approach looking at culture, political systems, education, and other elements of infrastructure; as well as unit planning and lesson-plan development for middle and secondary school classes.

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). 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.)

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 of credit is required.

SSE 5973r. Specialist in Education Thesis (1-6). (S/U grade only.) A minimum of six semester hours credit is required.

SSE 6931. Doctoral Seminar in Social Science Education (3). Critical review of research in social science education in preparation for the dissertation prospectus. Issues of epistemology and research methodology will be carefully analyzed and discussed.

SSE 6933. History of Social Studies/Social Science Education (3). The 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 8976r. Master's Thesis Defense (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.)

Note: Courses are subject to modification.

School of THEATRE

COLLEGE OF VISUAL ARTS, THEATRE, AND DANCE

Web Page: <http://theatre.fsu.edu/>

Chair: C. Cameron Jackson; **Professors:** Chappell, Dahl, Jordan, Muscha; **Associate Professors:** Coleman, Cooper, Eginton, Gelabert, Hale, Hogan, Jackson, Lickson, Ossowski, Salata; **Assistant Professors:** Delory, Malaev-Babel, Osborne; **Burt Reynolds Eminent Scholar Chair in Theatre:** TBA; **Hoffman Eminent Scholar Chair in Theater:** 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; 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 the 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 advisers 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 advisers 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 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 technical production's mission 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 wood-working, 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.

Note: The Scene Design program is not currently accepting applications.

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). 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). Topics in this course include Neoclassicism, Elizabethan/Jacobean, Spanish Gold Age, Restoration, Decline of Neoclassicism, and Germany.

THE 5160. Advanced Theatre History III: 19th and 20th Centuries (3). Topics in this course include Romanticism, Realism, Modernism, Postmodernism, and Postcolonialism.

THE 5238. History of African-American Drama (3). 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). The development of the American musical, in its cultural, theatrical and social context, from 1943 to the present is examined in this course. The elements of musical theatre and the various ways these elements are used in different types of musicals in various periods are explored.

THE 5265r. Historic Costume II (3). Prerequisite: THE 4260. Advanced study of selected periods of costume history and its relationship to the theatrical costume. Periods covered will 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. Selected topics in the history of acting and directing from the ancient Greeks to the present day. Investigation resulting in some form of report; with lectures and discussions. May be repeated once for credit with new content to a maximum of six semester hours.

THE 5287. History of Architecture and Decor (3). Examination of principal periods of architectural development and interior design from Ancient Egypt through the Art Deco movement in the 1930's.

THE 5317r. Seminar: Selected Topics in Dramatic Literature and Dramatic Theory (3). Prerequisite: Two undergraduate theatre history courses or instructor permission. Selected topics relating to dramatic literature and theatrical theory for intensive investigation resulting in some form of report; with lectures and discussions. May be repeated once for credit with new content to a maximum of six semester hours.

THE 5437. Gender, Race, and Performance (3). An advanced introduction to the contemporary theories and practices regarding the performances of race and gender upon the stage and in everyday life. Utilizing feminist theories of performance students will read playwright written by women of color, by white women, and by one African-American male.

THE 5439. African Theatre and Performance (3). Through an exploration of pre-colonial performance traditions, written plays, and contemporary popular culture, this course examines the cultural and political complexities of selected countries of sub-Saharan Africa.

THE 5486. Graduate Dramaturgy (3). 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 5770. Theatre History and Literature I for Theatre Educators (3). 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). 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 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 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 will be 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). The basic graduate course designed to introduce the student 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 the theatre only. Selected topics in theatre. May be repeated to a maximum of six semester hours.

THE 5925r. Writing Workshop (1–3). (S/U grade only.) The writing workshop 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. Resident internship in an approved professional theatre shop or enrichment center. May be repeated to a maximum of twelve semester hours.

THE 5943r. Supervised Teaching (1–5). (S/U grade only.) Prerequisite: Instructor permission. Faculty visits and observes student teaching in theatre. May be repeated to a maximum of five semester hours. A maximum of three semester hours may apply to the master's degree.

THE 5971r. Thesis (3–6). (S/U grade only.) Six semester hours credit required.

THE 5973r. Creative Thesis (3–6). (S/U grade only.) MFA candidates only. May be repeated to a maximum of nine semester hours. Six semester hours credit required.

THE 6531. Methods of Theatre Criticism (3). A study of major genres of theatrical criticism with focus on twentieth-century movements. The seminar is designed to aid not only dissertation analysis 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.) Taken within the first five semesters of residency; shows that student is qualified to continue program successfully. 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.) Taken after student has taken or is registered for a minimum of forty-eight hours.

THE 8966r. Master's Comprehensive Examination (0). (P/F grade only.) 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.) Form varies; may include portfolio review or vita presentation. Taken during one of the last two semesters of residency.

THE 8985r. Dissertation Defense (0). (P/F grade only.) Taken on completion of dissertation and within five years of passing preliminary examinations.

TPA 5015. Stage Machinery Design and Construction (3). 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). The purpose of this course is to acquaint students with current model building techniques and systems. Students will gain experience in constructing most of the elements closely 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). The content of 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). 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, 4071. An advanced exploration and analysis of the skills needed in rendering, with a specific focus on costume rendering techniques. The figure, fabric textures, drapery of clothing, garment characteristics and period styles.

TPA 5062. Scene Design: Theory and Practice (3). Advanced projects; emphasis on multiple scene productions, model building, rendering, and working drawings; execution of complex productions such as musicals and opera. Consent of instructor required.

TPA 5065. Principles of Scene Design (3). The course will explore the techniques and processes of design for the theatre. This will include the development of a dramatic concept, groundplan and final drawings.

TPA 5067r. Scenic Design III (3). Advanced design course combining fundamental elements together to form complete designs, termed "The Bid Package." May be repeated to a maximum of six semester hours.

TPA 5069r. Scenic Design IV (3). Tailors the individual needs of the student to the professional market. May be repeated to a maximum of six semester hours.

TPA 5079. Scene Painting (3). This course will investigate the principles and techniques of traditional two-dimensional scenic art.

TPA 5080r. MFA Practicum in Design for the Stage (2–15). Prerequisite: Instructor permission. Emphasis in scenic, costume, and lighting design for the stage. May be repeated to a maximum of six semester hours.

TPA 5086. Life Drawing for Designers (3). Using live, nude and draped models, the class will explore the problems of figure drawing as they relate specifically to the theatrical designer.

TPA 5089. Advanced Technical Theatre: Problems in Scene Painting (3). Painting scenery for the stage; handling of various paint media; effects of lighting on colors. Intensive study of master draftsmen and artists and ways of imitating artistic styles on stage. Consent of instructor required.

TPA 5098. Theatrical Design for Theatre Educators (3). A study of the principles and elements of design and how they are applied to scenery, costume and lighting design.

TPA 5203. Drafting (3). Familiarizes the theatrical design student with the drafting principles and accepted practices of theatrical design and technology. Projects will include isometric and orthographic projection, shop drawings, rear elevations, sections, ground plans, and drop point perspective.

TPA 5207. Technical Direction (3). A seminar type of course addressing the technical management techniques and graphic presentation skills required of the technical director in a variety of situations.

TPA 5213. Stage Rigging (3). A studio course introducing 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, 3248, or instructor permission. 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). Prerequisites: TPA 4040, or instructor permission. Exploration of 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). The advanced exploration of various millinery techniques. 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. Costume Fitting and Advanced Draping (3). Prerequisites: CTE 4751; THE 4260; TPA 3230. Application of advanced draping procedures to the realization of the costume designer renderings.

TPA 5245. Fabric Modification for Stage Costume (3). 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 Designing and Constructing Makeup, Hair and Wigs (3). This course studies makeup, hair and wig styles popular throughout history. Students gain practical experience in designing and constructing makeup, hair and wigs.

TPA 5280r. MFA Practicum in Technical Theatre (2–15). Prerequisite: Instructor permission. 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. Course provides students with more advanced knowledge and skills as a professional technical director. Focus on planning and management skills. 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. Acquiring of skills necessary to solve problems in technical theatre production such as microcomputers, hydraulics, rigging, tool maintenance, welding, 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 examines various methods of designing and constructing patterns, primarily for women's clothing and/or costumes. Patternmaking methods to be studied include drafting, flat patterning and draping. It is a project-oriented course.

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). Fundamentals of physics and Newton's Laws as they relate to stage machinery; application of these dynamics for prediction and understanding of motion of stage wagons, turntables or lifts. Emphasis is on 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). Concentration in costume design for film and television. 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 5355. Lighting Software for Theatre (3). This is an overview course in the primary light design and visualization software programs. No prior knowledge of computer-aided design is necessary. Significant individual work is required.

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 5385. Technical Production for Theatre Educators (3). Provides instruction for secondary education faculty in all areas of technical theatre production. Students should come away with the ability to train their own students in all aspects of technical theatre, as well as the ability to support productions they oversee.

TPA 5386. Advanced Technical Production for Theatre Educators (3). This course instructs secondary education faculty in advanced areas of technical theatre production. Students come away with the ability to train their own students in all aspects of technical theatre as well as the ability to support productions they oversee. In addition, persons taking this course learn to advise their students in the preparation of portfolios to be used to apply for BFA programs in theatre.

TPA 5405. Principles of Theatre Management (3). 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. 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. Course provides an overview of marketing and development for arts organizations. 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 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 bookkeeping terms and concepts; and financial statements.

TPA 5470r. MFA Practicum in Management (2–15). Prerequisite: Instructor permission. 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. Students also attain knowledge and skills needed to manage complex organizations and to coordinate effectively and manage personnel in an arts organization.

TPA 5505r. 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). 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. Resident internship in an approved professional theatre, shop, or enrichment center. May be repeated to a maximum of thirty semester hours.

TPP 5145r. Acting Techniques I (3). In addition to script analysis and interpretation, concentrated work with *Essences, Relationships, Objectives, Actions (Intentions), Obstacles, and Secrets* will be incorporated as a means to enable the actor to create a truthful reality within the given circumstances. May be repeated to a maximum of six semester hours.

TPP 5146r. Classical Performance Styles (3). 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.

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. 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). Development and strengthening of directing skills for working theatre educators. Concentrated work in direction of scenes and monologues.

TPP 5380r. MFA Practicum in Directing (2–15). Prerequisite: Instructor permission. 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 5381–5384. Problems in Directing (three [3] hours each). Prerequisites: TPP 4310, 4311; and/or instructor permission. Advanced directing scene work for the specialist.

TPP 5515r. Movement I (3). Explores and expands the actors 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). Emphasis on creating 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 (3). In-depth analysis of representative play scripts to enable realization in production. Consent of instructor required.

TPP 5656r. Advanced Play Analysis for Actors (3). This course is intended to provide actors with the tools for careful script analysis. This class explores the techniques and tools necessary to achieve a deep and objective reading of a text. May be repeated to a maximum of four semester hours.

TPP 5715r. Voice I (3). Emphasis is on understanding, through experience, how the voice is produced. Seeks to isolate and remedy personal obstacles hindering free release of sound from the body. May be repeated to a maximum of six semester hours.

TPP 5716r. Voice II (3). Emphasis is on understanding, through experience, the necessary tools for the exploration and performance of Shakespearean text. Application of these tools to the pursuit of intention and the creation of character in a variety of Shakespearean texts. 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. 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

Department of URBAN AND REGIONAL PLANNING

COLLEGE OF SOCIAL SCIENCES AND PUBLIC POLICY

Web Page: <http://www.coss.fsu.edu/durp/>

Chair: Tim Chapin; **Professors:** Deyle, Miles; **Associate Professors:** Brown, Chapin, Doan; **Assistant Professors:** Aurand, Butler, Coumts, Lewis; **Research Associate:** Saunders; **Professors Emeriti:** Cowart, Frank, RuBino

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 a diverse one, incorporating the 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, 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.

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, their likely future levels, and formulating appropriate policies and programs to deal with them. Moreover, unlike many other problem-oriented professions, planning is distinguished by its concern with coordinated policy responses. Planners have adopted the broader 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, and the 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 our 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 degrees 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 degree programs prepare professionals to work in positions at the nexus of their component professions.

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.

Almost 1,300 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:** twenty-one credit hours
- **Elected specialty area:** twelve to fifteen credit hours
- **Electives:** nine to twelve credit hours
- **Capstone requirement:** Three to six credit hours

Core Curriculum

URP 5101 Planning Theory and Practice (3)

URP 5125 Plan Implementation (3)

URP 5201 Planning Research Methods (3)

URP 5211 Planning Statistics (3)

URP 5222 Planning Alternatives Evaluation (3)

URP 5261 Forecasting for Plan Development (3)

URP 5847 Growth and Development of Cities (3)

URP 5930r Professional Topics in Urban and Regional Planning (0)

Specializations

The Department currently offers six specializations. They are:

- Growth Management and Comprehensive Planning
- Planning for Developing Areas
- Environmental Planning and Natural Resource Management
- Housing and Community Development
- Transportation Planning
- Planning and Community Health

All specializations are composed of two or three required courses and one to two electives 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, and word processing and GIS) are supported in an eight 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.

Capstone Requirement

Students are required to complete a capstone research paper, project, or master's thesis 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.

Typical Master's Program

The components of the master's program can be organized into a "typical" curriculum as follows:

Fall, First Year: URP 5101 (core), URP 5211 (core), URP 5847 (core), specialty intro course, URP 5930 (zero hours)

Spring, First Year: URP 5125 (core), URP 5201 (core), URP 5261 (core), specialty or elective, URP 5930 (zero hours)

Summer: Internship

Fall, Second Year: URP 5222 (core), specialty, specialty or elective, specialty or elective

Spring, Second Year: research paper/project/thesis, specialty, specialty or elective, specialty or elective

Joint Law and Planning Degree Program

The Department of Urban and Regional Planning and the College of Law offer a joint degree program that allows students to qualify for both the Master's 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 eleven, of which thirty-three are taken in planning and seventy-eight in law.

Joint degree 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.

Joint Planning and Public Administration Degree Program

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 degree program 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 degree program 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 using the joint degree program's unique major code (327777). To be admitted to the joint degree program, 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 degree program.

Total degree hours required for the joint degree is sixty-six. The student completes the core course requirements of each degree with these exceptions: the student completes **either** URP 5201 and URP 5211 **or** PAD 5700 and PAD 5701; the student completes URP 5222 and PAD 5035. The student selects and completes both an urban and regional planning specialization **and** a public administration concentration. A single internship meeting the requirements of both degrees is required. A single capstone/action paper meeting the requirements of both degree programs is completed under **either** URP 5910 **or** PAD 6908 and with the direction of a committee consisting 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 the second summer should be able to complete all degree requirements in two and one-half calendar years.

Joint Planning and International Affairs Degree Program

Because of the Department's strong interest in preparing students for careers in international development, the faculty created the Joint Planning and International Affairs Degree Program. It is one of very few programs in the nation to combine master's degrees in these two fields. Students completing this program of study will earn the MSP degree in urban and regional planning and the MA or MS in international affairs. The joint degree program can also be combined with the Peace Corps Master's Internationalist program.

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 using the joint degree program's major code (327779). A full photocopy of all application materials should be sent to the second unit's admissions office simultaneously. To be admitted to the joint degree program, 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 degree program.

Total degree hours required for the joint degree program is sixty-seven or sixty-eight 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 ten weeks full-time (or part-time equivalent) in a planning or international affairs related agency or organization. The internship should have planning or public policy-related content. A single capstone course meeting the requirements of both degree programs is completed under either master's theses courses URP 5971 or INR 5971 or capstone studio course URP 5342. Students in the joint degree program do not have the option of completing comprehensive exams to satisfy the capstone requirement. Students taking the studio option must take a studio with an international planning emphasis and also take three hours of directed individual study (INR 5906) related to the studio.

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 Degree Program

Florida State University is one of only a handful of universities offering a joint planning and public health degree.

This new joint degree 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 1970's 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.

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. 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 adviser and the MSP and MPH program directors.

Students also choose to complete either a research paper, thesis, or studio for MSP capstone credit.

Joint Planning and Demography Degree Program

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 degree program between planning and demography deepens the professional preparation and maximizes the professional prospects for graduate students in both disciplines.

The joint degree 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-one credit hours of planning core classes, twelve to fifteen 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 degree program, students must be evaluated and admitted by the Admissions Committees of each of the two participating units.

Peace Corps Master's International Program (MIP)

The rate of urbanization is much more rapid in developing than developed areas. The Master's International Program at FSU is designed to ensure a steady stream of volunteers for the planning of these rapidly growing urban areas. Courses cover the legal and institutional context in which planners operate, as well as specific strategies such as regional economic development, microenterprise development, housing and infrastructure, and capacity building particularly among non-governmental organizations.

Students develop skills in the preparation of development plans, in the design, management and implementation of development projects, and in participatory planning and research. Students are also encouraged to take courses in one or more of the other specializations in the Department, namely housing and community development, transportation, comprehensive planning and land use, environmental planning, and health planning.

MIP students will take the full sequence of core courses required for the MSP degree with a specialization in Planning for Developing Areas. However in recognition of the extensive training received during Peace Corps training in local language and cultural aspects of the host country, MIP students will be permitted to complete forty-two credit hours instead of the standard forty-eight credit hours. During their first year of courses MIP students must take URP 5610 Introduction to Planning for Developing Areas and URP 5616 Project Planning in Developing Areas to prepare them for Peace Corps service.

After finishing their first year of coursework, MIP students are placed as Peace Corps Volunteers in a developing countries position to work with local planners and administrators on problems of urban development, or to help non-governmental organizations fill the gap between government services and local needs. Upon completion of their two year Peace Corps service MIP students will return to Tallahassee to complete their degree requirements with at minimum of one more semester of courses. At this time, if students wish to change their specialization, they are free to do so, though this may require a slightly longer stay in Tallahassee.

MIP students may choose to do a master's paper for their capstone requirement based in part on their experiences in Peace Corps. Students who wish to pursue this option should discuss this carefully with their adviser prior to departing for their Peace Corps service. However, if students prefer they may complete a studio project under the supervision of departmental faculty to complete their capstone requirement once they return to Tallahassee.

The benefits of this program include:

- Peace Corps training provides a six credit reduction in total required for graduation
- Peace Corps service fulfills the departmental internship requirement
- Peace Corps offers the international experience needed to obtain employment in a developing country.
- Peace Corps service provides US Government non-competitive eligibility for returning volunteers

Certificate in Urban Design

The Department offers a graduate certificate in urban design that prepares professionals that are conversant in both design and planning languages and are able to devise, implement and communicate physical plans and policies to a diverse group of stakeholders. The certificate provides students with instruction in the history and theory of urban design, visualization techniques, and physical planning skills and application.

The certificate program is open to both FSU graduate matriculates and to non-matriculates studying under special graduate student status. Applicants may be, but are not required to be, currently pursuing the master's or PhD degrees in urban and regional planning. Those pursuing the MSP or PhD degrees, or other graduate degrees at FSU, must be in good academic standing to be admitted. There are no requirements for current FSU graduate degree students other than good academic standing. Non-matriculated applicants must satisfy current departmental admissions requirements.

To complete the certificate, students are required to complete twelve hours of class work in required courses in urban design, site design and land use analysis, pedestrian oriented communities, visualization methods for urban design, as well as electives in land use planning, transportation and land use, or neighborhood planning. Information on coursework and specific requirements may be obtained by contacting the department.

Certificate in Real Estate Development

The Department of Urban and Regional Planning, in cooperation with the College of Business, offers a graduate certificate in real estate development. Urban planners must have extensive knowledge of real estate development in order to adequately and efficiently regulate and work with real estate developers. In turn, developers must be able to operate in an environment in

which land use and environmental planning and regulation are critical to the success of their projects. Together, planners and developers must have a joint understanding of the real estate development process and the role that planning plays in shaping and regulating that process.

The certificate is available to any graduate student admitted and enrolled in either the master's program or PhD program in urban and regional planning or the MBA program in the College of Business. Students must be in good academic standing.

To complete the certificate, students are required to complete twelve semester hours of class work in the following areas: comprehensive planning and growth management, real-estate tools, land use and real estate law, design and development, market analysis, and investment and development. Information on coursework and specific requirements may be obtained by contacting the department.

Certificate in Collaboration and Dispute Resolution

The Department of Urban and Regional Planning offers a graduate certificate in Collaboration and Dispute Resolution which provides an opportunity for graduate students and post-graduate practitioners in urban planning and other public-policy related professions to develop expertise useful in moving public policy communities toward consensus and helping stakeholders resolve impasse. Skills covered include bargaining, negotiation, facilitation, mediation, and the design of programs for consensus building, all oriented toward the creation and implementation of plans and public policies. The expectation is that Collaboration and Dispute Resolution certificate studies will enhance the professional abilities of those working in planning and related professions. The certificate is not intended to qualify students for licensed or regulated work as mediators or arbitrators, although course content may be useful to those who later wish to pursue such possibilities.

The certificate program is open to students matriculated in graduate degree programs in urban and regional planning and related fields (such as environmental/land use law, geography, international affairs, public administration, and real estate), as well as to non-matriculates studying under non-degree seeking status.

Students are required to complete a minimum of twelve credit hours of collaboration and dispute resolution related coursework.

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.

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; coursework in two substantive areas and in 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 the two seminars in Urban and Regional Theory (URP 6846 and ECP 5606); 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 pre-requisites: 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 pre-requisite. When courses are taken to satisfy a pre-requisite 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 four required courses (twelve credit hours):

- ECP 5606: Urban and Regional Economics
- 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 research methods (nine credit hours) and study in 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.

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.

Admissions and Financial Aid

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 1st for Fall admission and November 1st 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 15th (January 15th 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 (in-

cluding 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, 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 Web site: <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 historically 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 November 15th for Fall term admission, and by September 1st 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, PO Box 3064240, Tallahassee, Florida 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 us with a firmer sense of the applicant's goals, and allows the applicant to evaluate resources here 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 5101. Planning Theory and Practice (3). 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. Also introduces students to the general area of planning theory and some of the fundamental political and ethical issues they will face in planning practice.

URP 5122. Planning Dispute Resolution (3). 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. 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). The 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). Under the general rubric of plan adoption and implementation strategies, the course will explore: legal aspects of plan making, implementation politics, policy implementation, interorganizational cooperation, and public participation.

URP 5342. Advanced Planning Problems (3). Prerequisites or Corequisites: URP 5222, 5261; instructor permission. Involves team study of specialized planning problems. 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). Examines the effects of planned and unplanned development on women. Analyzes the strategies pursued to address productive roles of women, not reproductive roles.

URP 5944. Dispute Resolution Practicum (3). Prerequisite: URP 5122. Supervised training in facilitation and mediation skills for aiding planning disputes. Students will work under the direct leadership of an environmental facilitator or mediator in convening dispute resolution or consensus forums, aiding stake holders in articulation interests, developing alternatives and concluding agreements.

URP 6102. Seminar in Planning Theory (3). 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. Majors only. 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 & 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 will be 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). The 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, 5211. 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). 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 6844. Seminar in Regional Theory (3). Prerequisite: URP 5847. This course concentrates on the regional theory component of urban and regional theory, with an emphasis on regions and the relationships between cities. Specific bodies of theory that will be examined include urbanization theory, distribution theory, location theory and inter-regional exchange.

URP 6846. Seminar in Urban Theory (3). Prerequisite: URP 5847. This courses 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). 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 will be spatial. Such an approach will permit 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 will be 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). Approaches the question of formulating and implementing effective strategies for development by identifying the obstacles and opportunities for planned change in less-developed countries. 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 5614. Population and Development Planning (3). Intended to provide the student with an understanding of issues, methods, strategies, and problems related to the integration of population information with policies for guiding the social and economic development of third-world nations. The topics to be covered include: 1) demographic conditions and trends of major world regions and specific countries; 2) population policies and intervention programs designed to alter demographic structures and processes; 3) the influence of demographic conditions and trends on indications of societal development; 4) development conditions and trends of major world regions and specific countries; 5) alternative policy and program strategies for promoting regional and societal development; 6) obstacles to the use of demographic information for development planning; and 7) procedures for promoting the use of demographic knowledge by development policymakers.

URP 5616. Project Planning in Developing Countries (3). The project cycle will be used 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 will also explore the implications for blueprint vs. process oriented approaches to project design and implementations.

Environmental Planning and Natural Resource Management

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 5421. Introduction to Environmental Planning and Natural Resource Management (3). 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. The student is 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 will also gain familiarity with the basic analytic approaches to valuing and comparing environmental projects, plans, and policies.

URP 5422. Coastal Planning (3). 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). 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, 5427, or instructor permission. 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). 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). 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.

Growth Management and Comprehensive Planning

URP 5312. Perspectives and Issues of Comprehensive Planning and Growth Management (3). 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.

URP 5316. Land-Use Planning (3). Prerequisites: URP 5272, 5312. Corequisite: URP 5312. Preparation of the urban land-use plan including data collection; evaluation of location, market, and environmental factors; and balancing of stakeholder interests.

URP 5319r. Special Topics in Comprehensive Planning and Growth Management (3). An advanced seminar on special topics in comprehensive planning and growth management. Specific content varies. May be repeated to a maximum of six semester hours.

URP 5350. Pedestrian-oriented Communities (3). Prerequisite: URP 5312 or 5711. 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 5731. The Planning of Community Infrastructure (3). Examines issues and techniques in planning for community infrastructure. Emphasis is placed on capital intensive infrastructure systems, but other services and facilities are covered. Considerable attention is devoted to analyzing variations in demand for infrastructure associated with land use types, intensities, and spatial form.

URP 5873. Site Design and Land-Use Analysis (3). Prerequisite: URP 5272. Focuses on the study and evaluation of the built environment, with particular reference to those aspects of the development process that result in "better" physical forms. Students should gain an appreciation for the architectural and design elements of land use development, be in a position to evaluate alternative site designs for impacts on use and functioning, and relate the design and uses of land to planning and growth control mechanisms in a critical way.

URP 5881. Urban Design (3). The course offers students the knowledge and skills necessary to understand and determine the physical planning and design of urban places. Topics cover key issues in contemporary urban design, planning, and architecture, with a focus on the form of the city and current trends in urban design practice. The course provides students with a critical understanding of the wider social and environmental impacts on the shape, structure, and design of historic and contemporary urban projects and developments.

Transportation Planning

URP 5711. The Transportation Planning Process (3). Introduction to various aspects of contemporary U.S. transportation problems, sources of funding, and legislation. 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). 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). A presentation of the linkage between planning model outputs and the development of alternative transportation plans. Topics include techniques of facility location assessment, horizontal alignment, vertical alignment, capacity analysis, and impact assessment, as employed at the preliminary design stage of proposed transportation network improvements.

Housing and Community Development

URP 5540. State and Local Economic Development (3). 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). An examination of 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). Introduction to 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). Focuses on ways in which planning can enable neighborhood residents to enhance the attractiveness of their neighborhood. Course is for planners who will be working with neighborhood groups or who will be employed by neighborhood organizations or community development corporations.

URP 5749r. Special Topics in Housing and Community Development (3). Advanced seminar in selected housing and community development issues and problems. Content varies. May be repeated to a maximum of six semester hours.

Planning for Health and Aging

URP 5521. Public Health Epidemiology (3). This course covers selected information, concepts, and methods from the field of epidemiology, with emphasis on the methods by which risk factors are identified and evaluated as potential causes of health-related events. The course is geared toward providing students with a basic understanding of epidemiology, its role as the foundation for public health, and how it is practiced.

URP 5522. Regulatory Aspects of Health Care (3). Major governmental policies developed to facilitate access to health care are examined, particularly policies of the federal government. Major federal and state regulatory policies affecting health and long-term care are examined for policy intent and effect on the intersection of health financing and the delivery of health care.

URP 5525. Health Behavior and Education (3). This course explores and applies various theoretical models used to explain the behaviors that influence health. Educating persons about the risks of certain behaviors is a fundamental component in the holistic model of health.

URP 5526. Healthy Cities, Healthy Communities (3). This course covers two basic questions: what is a healthy city/community; and what are civic stakeholders, local communities, and global society doing to ensure that urban and urbanizing landscapes are healthy and desirable places for today's world? The course first examines what we know about the links between places and population health. The course then looks at what public health, environmental health, planning agencies, and community movements are doing to improve the health of people and places.

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.) Majors 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.

URP 5939r. Special Topics in Urban and Regional Planning (0-3). 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, 6846, 6938. Preparation for doctoral preliminary examination. May be repeated to a maximum of twelve (12) 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.)

Program in WOMEN'S STUDIES

COLLEGE OF ARTS AND SCIENCES

Web Page: <http://www.fsu.edu/~womenst/>

Director: Joyce Carbonell (Psychology/Women's Studies); **Participating Faculty:** Falk, Pohl (Anthropology); Lindbloom (Art); Bearor, Neuman (Art History); Gilmer (Chemistry); N. DeGrummond, Fulkerson, Pullen, Sickinger, Slaveva-Griffin (Classics); Jordan, Laurents, McDowell, Nudd (Communication); Young (Dance); Lake, Losh, MacDonald, Schwartz, Shargel, Wood (Education); Cooper, Daileader, Edwards, Fleming, Gardner, Goodman, Kidwell, Laughlin, McGregory, Meehan, Moffitt, Montgomery, Moore, Phillips, Rowe, Saladin-Adams, Walker (English); Darling (Family and Child Sciences); Wylder (Fine Arts); Herrera, Jones, Jumonville, Upchurch Jr., Sinke (History); Ralston (Human Sciences); Johnson (Humanities); Case (Mathematics); Boutin, Cappuccio, Cloonan, Hargreaves, Leushuis, Maier-Katkin, Poey, Sharpe, Walters (Modern Languages and Linguistics); Cottrell, Davis (Nursing); Abood (Nutritional Sciences); Marcus (Oceanography); Dancy, Morales (Philosophy); Lynn (Physical Education); Carbonell, Hull, Kistner, Lane (Psychology); Cuevas, Dunn, Erndl, Kalbian, Kavka, Kelsay, Koehlinger, Leto, Reid (Religion); Anson, Ashmore, Dwyer, Edwards, Graham, McPherson, Otte, Rutledge, Vinton, Wilke (Social Work); Barrett, Brewster, Eberstein, Isaac, Lessan, McCabe, Miller, Padavic, Rohlinger, Schrock, Taylor, Tillman, Weinberg (Sociology); Reynaud (Sport Management); Sandahl (Theatre); Doan, Miles (Urban and Regional Planning); **Adjunct Faculty:** Rachel Sutz-Pienta

Women's Studies courses are taught by faculty in more than twenty departments throughout the University.

Women's Studies is an interdisciplinary and interdepartmental program that examines the status, accomplishments, and perspectives of women in history, culture, and contemporary society. The Women's Studies Program further seeks to delineate the richness and diversity of women's experiences and viewpoints by exploring the dynamics of gender, race, culture, and class. The program offers an interdisciplinary minor.

By placing women at the center of inquiry, women's studies courses offer new perspectives on human history and the human condition. Using gender as a category of analysis, these classes examine the systematic arrangements in society that have shaped the lives of women and men and reevaluate traditional gender-based stereotypes. The courses foster critical analysis of assumed truths about society by examining paradigms based upon the feminist scholarship of the last three decades.

Students pursuing research in women's studies at Florida State University will find a rich array of materials on women and gender in the government document holdings and numerous microform manuscript collections available at Strozier Library and in the extensive collections of the College of Law Library and the Mildred and Claude Pepper Library. The Jean Gould Bryant Library of Women's Studies is housed in the Office of Women's Studies, 214J WJB, and provides books, journals and newsletters relevant to women's studies. A searchable database of these resources also is available. The nearby State Archives are an additional source of research material. For more information and updates, see the Women's Studies Program Web site at <http://www.fsu.edu/~womenst/>.

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 5564 Women in Modern America (4)
- AMH 5567 Women in 19th-century America (4)
- CCJ 5672 Gender, Crime and Justice (3)
- EDA 5227 The Role of the Woman Administrator in Education (3)
- EDF 5706 Gender and Education in Comparative Perspective (3)

- LIT 5388r Studies in Women's Writing (3)
- PET 5252 Gender Issues in Sport and Physical Activity (3)
- SOW 5109 Woman's Issues and Social Work (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 5817 Contemporary Theories of Gender (3)
- SYO 5177 Family Demography (3)
- SYO 5376 Sociology of Gender and Work (3)
- SYO 5426 Gender and Mental Health (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 5905r. Directed Independent Study (1–3). (S/U grade only.) Prerequisite: At least one women's studies course. 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 credit 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 will be offered from an interdisciplinary perspective. Topics of material not normally covered in the regular curriculum will be offered. May be repeated to a maximum of six semester hours.

WST 5936r. Interdisciplinary Topics in Feminist Theory (3). Prerequisite: At least one women's studies course. Corequisite: Program Approval. This course will focus on gender within major current theories, perspectives, and methodologies developed with any combination of the natural and social sciences and the humanities. This course will be of value to students approaching gender and women's issues from any disciplinary perspective. May be repeated to a maximum of six semester hours.

ZOOLOGY:
see Biological Science

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